

14 IMPLEMENTATION PLAN

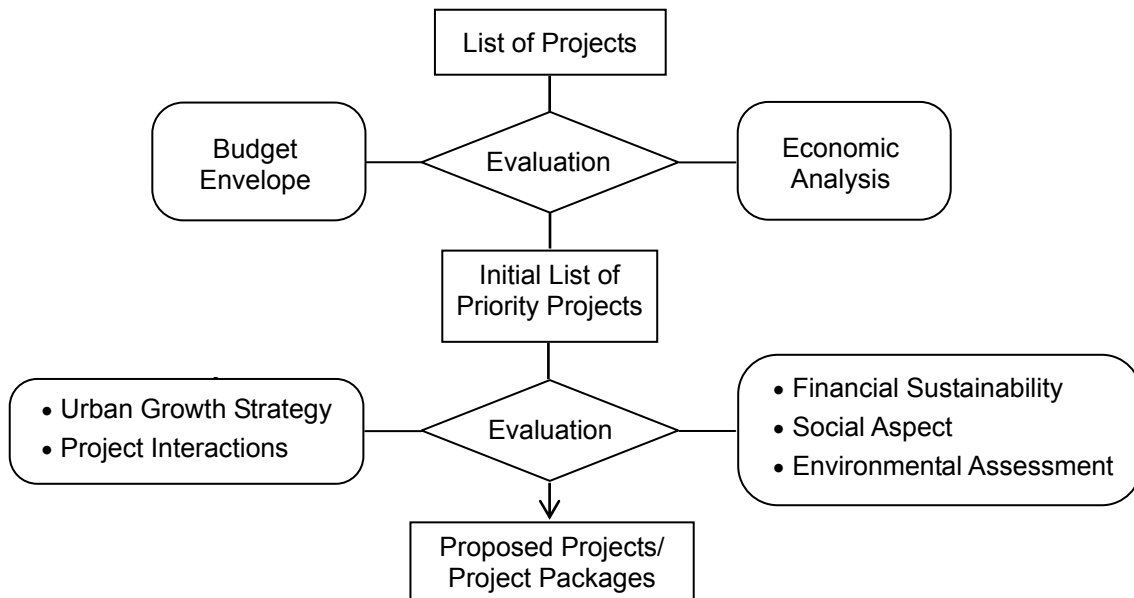
14.1 Prioritizing and Packaging Projects

1) Approach

While the lists of projects identified in subsector planning have been prepared, the next step is to prioritize them in compliance with the overall urban development policy, as well as economic, financial, social, and environmental viabilities, and others. Even though individual projects are feasible, it is often the case that the budget envelope of the government is limited. In HAIDEP project prioritization was undertaken as explained briefly below (see Figure 14.1.1).

- (a) **List of Identified Projects:** A list of projects was prepared by subsector.
- (b) **Initial List of Priority Projects:** Projects were prioritized based on a cost-benefit analysis to verify their respective economic viabilities. At the same time the likely available budget of the government was estimated.
- (c) **Comprehensive Evaluation of the Project:** The projects were then evaluated comprehensively from the financial, social, as well as environmental viewpoints and as to their compliance with the urban growth strategy and the interrelationships among projects.
- (d) **Proposed Projects and Projects Packages:** Proposed projects and project packages were categorized into two “Basic Projects” and “Strategic Projects.” The former is a rather conventional project listing, while the latter is more strategic, with projects that are expected to bring significant and maximum urban development benefits.

Figure 14.1.1 Framework for Project Evaluation and Prioritization

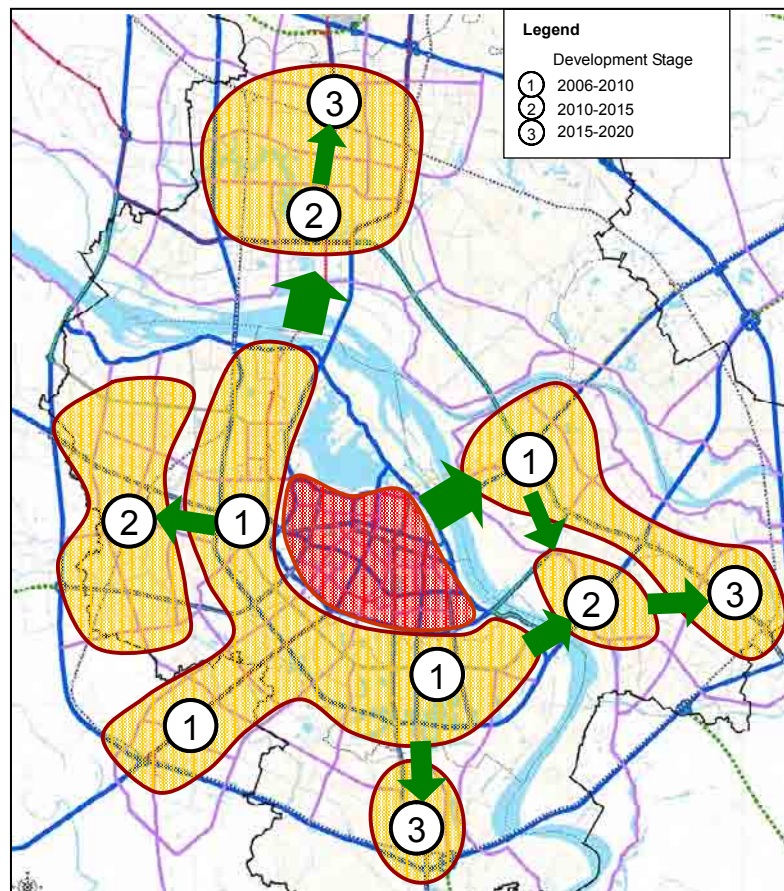


Source: HAIDEP Study Team.

2) Compliance with Planned Urban Area Growth Strategy

The infrastructure development must be undertaken in a way that it will support and promote desired growth of urban areas. This is particularly important for Hanoi where future expansion of urban areas is unavailable and expected to be significant. Main transportation infrastructures play a key role in guiding the urban expansion, while environmental projects and utility service project must be implemented in coordination with the development of urban areas. In this process, adequate institutional and support measures are provided to encourage orderly private sector investment. Planned growth strategy is conceptually illustrated as shown in Figure 14.1.2.

Figure 14.1.2 Planned Growth Strategy for Urban Areas



Source: HAIDEP Study Team.

14.2 Consolidated List of HAIDEP-proposed Projects

1) Overview

Projects and project packages which comprise the HAIDEP-proposed Master Plan were listed for urban and regional transportation, urban water and sanitation, living conditions, as well as urban development. Of these urban subsectors, urban development projects were excluded from the economic and financial evaluation since they are carried out with private sector initiative and investments. Government's role is to manage the process so that developments serve public interest and promotes the envisioned urban development. These urban development projects must also be financially independent, although the responsibility of providing the basic infrastructure will be shared by the government.

2) Regional Transportation

This subsector comprises primary roads (19 projects at US\$ 4,610 million), railway (16 projects at US\$ 2,680 million), airport (1 project at US\$ 3,350 million), inland waterway/ports (5 projects at US\$ 180 million) (see Table 14.2.1).

Table 14.2.1 Proposed Regional Transportation Projects

Component	Project				Project Cost (US\$ mill.)				Implementing Agency	Status	Schedule	
	Code	Title (ID)	Type	Km	Const.	Land Acquisition	Compensation	Total				
Road	TH01	Eastern North-South expressway	E	190.0	532	113	20	665	CG	N	~ 20	
	TH02	Hanoi – Viet Tri Doan Hung – Lao Cai	E	124.0	347	74	13	434	CG	N	~ 15	
	TH03	Hanoi – Thai Nguyen	E	65.0	182	38.675	6.825	228	CG	N	06-15	
	TH04	Lang - Hoa Lac - Hoa Binh		80.0	224	47.6	8.4	280				
	TH05	Ninh Binh – Hai Phong – Quang Ninh	E	160.0	448	95.2	16.8	560	CG	N	21 ~	
	TH06	Wester North-South Expressway	E	120.0	336	71.4	12.6	420	CG	N	21 ~	
	TH07	National Highway NH2	P	119.0	60.6	12.9	2.3	76	CG	N	06-10	
	TH08	National Highway NH3	P	114.0	47.9	10.2	1.8	60	CG	N	11-15	
	TH09	National Highway NH6	P	126.0	258.9	55.0	9.7	324	CG	N	16-20	
	TH10	National Highway NH10	P	187.0	84.9	18.0	3.2	106	CG	N	16-20	
	TH11	National Highway NH18	P	309.0	39.4	8.4	1.5	49	CG	N	11-15	
	TH12	National Highway NH32	P	147.0	85.2	18.1	3.2	106	CG	N	21 ~	
	TH13	National Road NH21	P	210.0	6.4	1.4	0.2	8	CG	N	11-15	
	TH14	National Road NH21B	P	58.0	46.4	9.9	1.7	58	CG	N	21 ~	
	TH15	National Road NH23	P	27.0	21.6	4.6	0.8	27	CG	N	06-10	
	TH16	National Road NH38	P	85.0	116.0	24.7	4.4	145	CG	N	06-10	
	TH17	National Road NH39	P	109.0	216.0	45.9	8.1	270	CG	N	11-15	
	TH18	Hanoi Ring Road 5	P	320.0	192	40.8	7.2	240	CG	N	11-30	
	TH19	Hanoi - Hai Phong, Quang Ninh	E	141.0	462	79	13	554	CG	N	05-20	
		Subtotal (TH)		2691.0	3706.4	768.4	134.7	4609.5				
Rail	TL05	Hanoi Rail freight capacity expansion	R					240.0	CG	N	11-15	
	TL06	Hanoi VR Circle Line (West) upgrading	R					300.0	CG	N	06-10	
	TL07	Hanoi Circle Line (East)	R					500.0	CG	N	11-15	
	TL08	VR Lao Cai to Yen Vien expansion	R					60.0	CG	P	06-10	
	TL09	VR Hanoi to Hai Phong upgrading	R					600.0	CG	P	11-15	
	TL10	VR Haiphong to Dinh Vu port freight line	R					20.0	CG	P	06-10	
	TL11	VR Yen Vien to Ha Long (Cai Lan Port) expansion	R					254.0	CG	O	06-10	
	TL12	VR Hanoi telecommunications upgrade	R					12.0	CG	P	06-10	
	TL13	VR Hanoi Signaling upgrading	R					71.0	CG	P	06-10	
	TL14	VR Dong Anh to Quan Trieu	R					75.0	CG	P	16-20	
	TL15	VR Hanoi to Dong Dang upgrading	R					180.0	CG	P	16-20	
	TL16	VR Hanoi to HCM	R					270.0	CG	P	11-15	
			Subtotal (TL inter-city)						2582.0			
	Airport	TA01	Noi Bai Int'l Airport Expansion & Improvement Project	A					3350.0			06-10
		TA02	Noi Bai Airport Express (UMRT2) (see TL04)	A								15-20
			Subtotal (TA)						3350.0			
IWT Port	TT01	New North Port	I					21.4	CG	P	11-15	
	TT02	Hanoi Port	I					39.1	CG	P	11-15	
	TT03	Khuyen Luong Port	I					35.5	CG	P	11-15	
	TT04	New East Port	I					57.2	CG	P	06-10	
	TT05	Long Bien multimodal Tourist Ferry Terminal	I					25.0	HPC	N	16-20	
		Subtotal (TA)							178.2			
	Total							10719.7				

Source: HAIDEP Study Team.

Note: Refer to next table for the legends.

3) Urban Transportation

The urban transportation subsector includes urban roads (43 projects at a cost of US\$ 7,980 million), traffic management (6 projects, US\$ 440 million), and public transportation (5 projects, US\$ 5,470 million) (see Table 14.2.2).

Table 14.2.2 Proposed Urban Transportation Projects

Component	Project Profile				Project Cost (US\$ mill.)				Implementing Agency	Status	Schedule
	Code	Title (ID)	Type	Km	Const.	Land Acquisition	Compensation	Total			
Urban Roads	TR01	Ongoing		65.6	391.9	592.8	94.0	1078.6			
	TR02	CBD Center Area Upgrade		4.8	7.7	160.9	37.3	205.8			
	TR03	RR3: Nhat Tan Bridge Section		9.0	437.3	60.8	0.6	498.7			
	TR04	RR(2): Phu Xa - HQV road (8)	P	4.1	14.6	72.3	10.7	97.6	HPC	N	08-10
	TR05	RR2: South Section		4.4	16.0	110.5	24.4	151.0			
	TR06	RR(2): Ng Khai-(Vinh Thuy)-NH5 (13)	P	4.8	335.7	19.9	0.0	355.6	HPC	N	09-12
	TR07	RR3 Southwest Section		7.3	59.0	267.3	30.0	356.3			
	TR08	RR3 Southeast Section		6.9	33.7	58.9	9.6	102.2			
	TR09	RR(3): NH3-NH1 (107)	P	8.5	93.7	47.4	3.5	144.6	HPC	P	~ 15
	TR10	RR3 North Section		18.6	86.0	63.7	2.1	150.8			
	TR11	RR4 West Section		12.8	166.3	61.0	1.8	229.1			
	TR12	RR4 Southwest Section		22.9	95.7	84.3	5.7	185.7			
	TR13	RR4 Southeast Section		28.9	424.5	104.0	1.6	530.0			
	TR14	RR4 North Section		23.8	76.1	67.2	11.6	154.9			
	TR15	NH2: RR4-NH23 (32)	P	4.7	15.6	16.3	3.4	35.3	CG	P	~ 20
	TR16	East West Highway North in North of Hanoi		14.1	14.1	14.1	0.0	28.2			
	TR17	East West Highway in the North of Hanoi		16.7	24.0	33.9	2.4	60.4			
	TR18	RR4-Bac Thang Long Road (37)	P	4.1	13.5	7.2	0.0	20.7	HPC	N	~ 15
	TR19	East West Highway Southeast in North Hanoi		21.2	25.7	77.2	2.8	105.7			
	TR20	North South Highways in the North of Hanoi		36.0	123.7	152.2	16.0	291.9			
	TR21	NH3: Bypass (expressway) North (39)	E	21.5	86.4	43.0	1.4	130.8	HPC	N	07-10
	TR22	RR3-RR4 (41)	S	5.2	5.4	15.8	0.0	21.2	CG	P	~ 20
	TR23	R8: RR3 - RR4 (40)	S	5.5	6.3	35.0	0.0	41.3	CG	N	~ 20
	TR24	Thuy Khue Road-RR2 (44)	P	3.3	5.0	33.2	12.6	50.8	HPC	N	~ 20
	TR25	NH32 North Corridor Package (Inner RR3)		10.6	14.8	147.6	12.5	175.0			
	TR26	NH32 North Corridor Package (Outer RR3)		29.3	41.8	363.3	24.3	429.5			
	TR27	Lang Hoa Lac North Corridor (Inner RR3)		4.4	6.5	130.2	14.8	151.5			
	TR28	Lang Hoa Lac North Corridor (Outer RR3)		17.2	17.0	211.2	11.7	239.9			
	TR29	CBD South West Area Upgrade		5.8	11.6	202.3	45.9	259.8			
	TR30	NH6 North Corridor Package		18.4	22.3	221.4	13.0	256.7			
	TR31	NH6 South Corridor Package (Inner RR3)		9.8	11.5	228.7	29.4	269.5			
	TR32	NH6 South Corridor Package (Outer RR3)		17.8	18.1	106.9	14.1	139.0			
	TR33	NH1A East Corridor in the South of Hanoi		16.0	22.8	230.4	55.1	308.2			
	TR34	NH5 North West Corridor Package		18.4	20.7	33.5	2.4	56.7			
	TR35	NH5 North East Corridor Package		12.1	15.8	24.3	0.6	40.7			
	TR36	Dong Tru Bridge-RR3 (80)	S	11.6	12.1	35.2	6.9	54.2	CG	N	10-13
	TR37	NH5 South Corridor Package (Outer RR3)		17.0	22.6	35.5	0.3	58.4			
	TR38	NH1 Corridor Package in the East of Hanoi		13.2	10.7	10.7	1.1	22.5			
	TR39	NH5: Nguyen Van Cu Road-RR4 (89)	P	10.8	24.4	64.7	13.5	102.6	HPC	P	~ 20
	TR40	CBD South East Area Upgrade		3.8	7.0	62.6	19.2	88.7			
	TR41	RR2-North Ring Road (92)	S	19.8	29.7	89.1	1.4	120.1	HPC	N	~ 20
	TR42	RR4-RR4		18.5	25.4	25.4	2.1	52.9			
	TR43	NH2-Noi Bai TL		12.5	54.3	85.5	0.0	139.8			
		Subtotal (TR)		621.7	2946.0	4507.3	539.8	7992.9			
Traffic Management and Safety	TM01	TDM: Traffic Demand Management	TE				54.8	HPC	N	06-20	
	TM02	Sidewalk Improvement					210.0				
	TM03	Signals and Associated Systems	TE				82.2	HPC	N	06-20	
	TM04	Parking Management	RF				44.4	HPC	N	06-20	
	TM05	Traffic Management Capacity Building	TR				2.3	HPC	N	06-10	
	TM06	Comprehensive Traffic Safety Improvement Prog.					50.0				
		Subtotal (TM)					443.7				
Public Transportation	TP01	Bus Acquisition and Replacement	B				171.5	PRI	N	06-20	
	TP02	Priority Bus Transit	B				91.7	HPC	N	06-20	
		Subtotal (TP)					263.2				
	TL01	UMRT Line 1	R	34.5			908.4	HPC	N	12-14	
	TL02	UMRT Line 2	R	63.0			2367.7	HPC	N	14-16	
	TL03	UMRT Line 3	R	33.0			1492.3	HPC	N	16-18	
TL04	UMRT Line 4	R	52.5			361.3	HPC	N	18-20		
		TL05	Noi Bai Airport Express (UMRT2)								
		Subtotal (TL-urban)		183.0			5129.7				
		Total		804.7	2946.0	4507.3	539.8	13829.5			

Source: HAIDEP Study Team.

Type:

E - Expressways
 P - Primary Road
 S - Secondary Road
 C - Collector
 TE - Traffic Engineering
 TR - Training, Education, and Capacity Building
 B - Bus
 RF - Roadside Facilities
 R - Railway (Urban or Inter-city)
 A - Airport
 I - Inland Waterway Transportation

Implementing Agency:

DAA - Development Aid Agency
 CG - Central Government
 HPC - Hanoi People's Committee
 PRI - Private
 OTH - Others

Status:

O - Ongoing
 C - Committed
 P - Planned
 N - Proposed

4) Urban Water and Sanitation

The urban water and sanitation subsector includes water supply (6 projects at US\$ 580 million), drainage (9 projects at US\$ 2,080 million), sewerage (12 projects at US\$ 1,050 million), flood control (5 projects at US\$ 220 million), and lake improvement (3 projects at US\$110 million) (see Table 14.2.3).

Table 14.2.3 Proposed Urban Water and Sanitation Projects

Component	Project			Project Cost (US\$ mill)				Implementing Agency	Status	Schedule
	Code	Title	Type	Const.	Land Acquisition	Compensation	Total			
Water Supply	WS01	Southwest Water Supply Devt. (Stage 1)	W	91.6	6.0	1.5	99.1	HWBC	N	10-11
	WS02	Southwest Water Supply Devt. (Stage 2)	W	30.5	2.0	0.5	33.0	HWBC	N	19-20
	WS03	Southeast Water Supply Devt. (Stage 1)	W	106.7	6.0	0.9	113.6	HWBC	N	10-11
	WS04	Southeast Water Supply Devt. (Stage 2)	W	71.1	4.0	0.6	75.7	HWBC	N	19-20
	WS05	North Water Supply Devt. (Stage 1)	W	163.5	8.0	1.2	172.7	HWBC	N	10-11
	WS06	North Water Supply Devt. (Stage 2)	W	81.8	4.0	0.6	86.4	HWBC	N	19-20
	Subtotal (WS)			545.2	30.0	5.3	580.5			
Drainage	WD01	To Lich River Basin (Stage 2)	D	198.9	34	6.8	239.7	HPC	C	07-10
	WD02	Nhue River Left Basin	D	264.4	160	32	456.4	HPC	P	11-15
	WD03	Nhue River Right Basin (Phase 1)	D	142.7	89	17.8	249.5	HPC	N	13-15
	WD04	Nhue River Right Basin (Phase 2)	D	58.5	37	17.8	113.3	HPC	N	16-18
	WD05	Long Bien & Gia Lam (Phase 1)	D	172.1	65	13	250.0	HPC	N	11-13
	WD06	Long Bien & ia Lam (Phase 2)	D	221.2	74	14.8	309.9	HPC	N	16-18
	WD07	Dong Anh (Central Part)	D	210.6	53	10.6	274.2	HPC	N	16-20
	WD08	Soc Son	D	119.3	19	3.8	142.1	HPC	N	18-20
	WD09	Thanh Tri	D	41.1	7	1.4	49.4	HPC	N	18-20
	Subtotal (WD)			1428.8	538.0	118.0	2084.5			
Sewerage	WW01	West Lake Environmental Improvement	S	23	1	0.2	24.2	DAA&HPC	O	07-09
	WW02	Bay Mau Lake Environmental Improvement	S	22.2	3	0.6	25.8	HPC	C	08-10
	WW03	Kim Nguu River Environmental Improvement	S	122.9	4	0.8	127.7	HPC	N	09-10
	WW04	Lu River Basin Environmental Improvement	S	81.9	11	2.2	95.1	HPC	N	11-13
	WW05	Upper To Lich River Basin Env'tl Improvement	S	150.9	23	4.6	178.5	HPC	N	09-10
	WW06	Lower Kim Nguu River basin	S	83.2	5	1	89.1	HPC	N	11-15
	WW07	Lower To Lich River Basin	S	29.2	7	1.4	37.6	HPC	N	11-15
	WW08	Nhue River Left Basin	S	152.1	7	1.4	160.5	HPC	N	11-15
	WW09	Nhue River Right Basin	S	66.6	3	0.6	70.1	HPC	N	16-18
	WW10	Long Bien & Giam Districts	S	130	6	1.2	137.1	HPC	N	11-13
	WW11	North Thang Long Expansion	S	21	1	0.2	22.6	HPC	N	13-15
	WW12	Central Dong Anh	S	73.8	3	0.6	77.3	HPC	N	16-18
	Subtotal (WW)			956.8	74.0	14.8	1045.6			
Flood Control	WFD1	Red River Dyke Strengthening (Stage 2)	F	38.0	0.0	0.0	38.0	CG	N	n/a
	WFD2	Duong River Dyke Strengthening (Stage 1)	F	38.0	0.0	0.0	38.0	CG	N	n/a
	WFD3	Duong River Dyke Strengthening (Stage 2)	F	38.0	0.0	0.0	38.0	CG	N	n/a
	WFD4	Regeneration of Day River Diversion Channel	F	103.1	0.0	0.0	103.1	CG	N	n/a
	WFD5	Flood Forecasting and Warning System	F	5.4	0.0	0.0	5.4	CG	N	n/a
	Subtotal (WF)						222.5			
Lake Improvement	WLD1	Lake Improvement (Phase I)	L	13.4	1.2	0.2	14.8	HPC	C	~ 10
	WLD2	Lake Improvement (Phase II)	L	50.4	4.5	n/a	54.9	HPC	P & N	~ 20
	WLD3	Diversion System for Env'tl Maintenance Flow	L	37	6	1.2	44.2	HPC	N	~ 20
	Subtotal (WL)						113.9			
Total							4047.0			

Source: HAIDEP Study Team.

Legend: Type: D - Drainage L - Lake Improvements Implementing Agency: DAA - Development Aid Agency PRI - Private Status: O - Ongoing
F - Flood Protection W - Water Supply CG - Central Government OTH - Others C - Committed
SW - Solid Waste Management S - Sewerage HPC - Hanoi People's Committee P - Planned
N - Proposed

5) Living Conditions

The living conditions subsector includes housing (2 projects at US\$ 2,560 million) and parks (7 projects at US\$ 5,220 million) (see Table 14.2.4).

Table 14.2.4 Proposed Living Conditions Projects

Component	Project Profile				Project Cost (US\$ mill.)				Implementing Agency	Status	Schedule
	Code	Title (ID)	Type	Unit	Const.	Land Acquisition	Compensation	Total			
Housing	LC-1	Project on Low-cost Rental Housing	H	50,000 units	368.4	168.8		537.2	HPC	N	06-20
	LC-2	KTT Improvement	H	271.1	1662.3	214.0	148.8	2025.1	HPC	P	06-20
	Subtotal				2030.7	382.8	148.8	2562.3			
Park and Green Space	PG-1	Parks and Green Spaces in Urban Devt. Area	P	5,745 ha	1151.0	2301.0		3452.0	HPC	P	06-20
	PG-2	Ho Tay - Yen So Green and Water Network	P		1.8	3.6		5.4			
	PG-3	Lakeside Parks	P	37.5 ha	7.5	15.0		22.5			
	PG-4	Parks with Retention Pond (9 parks)	P	1,215.0 ha	243.0	486.0		729.0			
	PG-5	Neighborhood Park Development Project	P	1,580.0 ha	316.0	632.0		948.0			
	PG-6	Co Loa Historical Park	P	100.0 ha	20.0	40.0		60.0	HPC	P	06-20
	PG-7	Bat Trang Cultural Park	P	10.0 ha	2.0	4.0		6.0	HPC	N	06-20
	Subtotal			8,686.5 ha	1741.3	3481.6	0.0	5222.9			
Total					3772.0	3864.4	148.8	7785.2			

Source: HAIDEP Study Team.

6) Urban Development

This subsector is self-financing based on the development of the infrastructure mentioned in previous sections. Its main categories include: (i) greenery improvement and cultural promotion, (ii) redevelopment/improvement of existing urban areas, (iii) new development in new urban areas, (iv) rural area improvement, and (v) industrial and logistics improvement (see Table 14.2.5).

Table 14.2.5 Proposed Urban Development Projects

Category	Development Purpose	Code	Title	Location ¹⁾ (ha)	Main Function			
					Urban Competitiveness	Livability	Culture/Environment	Poverty Reduction
1. Greenery Improvement and Cultural Promotion	1-1 Historical and Cultural Heritage Site Improvement	UD01	Ancient Quarter Revitalization	HK (100)	✓	✓	✓	✓
		UD02	French Quarter Preservation and Redevelopment	HBT (140)	✓		✓	
		UD03	Son Temple Historical and Natural Tourist Zone	SS (2,100)			✓	
	1-2 Red River Revitalization	UD04	Green River Corridor Development	TH, HK, HBT, HM, GL, LB, DA (85km)			✓	
		UD05	Thang Long-Hoan Kiem River Waterfront Development	HK-HBT (115)			✓	
	1-3 Co Loa- Thang Long Green Axis Development	UD06	Co Loa Citadel Renovation	DA (755)			✓	
		UD07	Co Loa South Green Zone Development	DA (1,290)			✓	
		UD08	Recreation Network Development (cycling & pedestrian) along Ho Tay	TH (40)			✓	
	1-4 Green Network Development	UD09	Park Network from Ho Tay to Yen So	TH, BD, HBT, HK, HM (10.9km)			✓	
		UD10	Park within retention ponds	Citywide			✓	
		UD11	Lakeside Park Development	Citywide			✓	
		UD12	Community-level Park Development	Citywide		✓	✓	
	1-5 Education & Research Facilities Development	UD13	School Network Development	Citywide		✓		
		UD14	Higher Education & Research Center Devt. in Tay Mo	TL (397)	✓			
		UD15	Higher Education & Research Center Devt. in Trau Quy	GL (150)	✓			
		UD16	Higher Education and Research Center Devt. in Van Tri	DA (149)	✓			
2. Redevelopment and Improvement of Existing Urban Areas	2-1 Poor Living Conditions Improvement	UD17	Tools No.1 Factory Area (KTT) Redevt. (along w/ UMRT2)	TX (8)		✓		✓
		UD18	Dong Tam Area (KTT) Redevt. (along w/ UMRT1)	HBT (11)		✓		✓
		UD19	Phuong Mai Area (KTT) Redevt. (along w/ UMRT1)	HM (11)		✓		✓
		UD20	Van Chuong Area (incl KTT) Redevt (along w/ UMRT1/3)	BD (97)		✓		✓
		UD21	Other KTT improvement	19 KTT		✓		✓
	2-2 Urban Redevelopment with Public Transportation	UD22	Hanoi Station Area Redevt in relation to UMRT No.1	DD (53)	✓			
		UD23	Thanh Xuan Area Urban Redevt in relation to C3-NH6	TX (90)	✓	✓		
		UD24	Long Bien Comm'l Center Area Redevelopment on NH5	LB (140)	✓			
		UD25	Soc Son Comm'l Center Area Redevelopment on NH3	SS (20)	✓			
		UD26	Station area redevelopment	Citywide	✓			
	2-3 Redevelopment of Factory Relocation Site	UD27	Minh Khai Area (industry area) Redevelopment	HM (155)	✓	✓		
		UD28	Phap Van Area Redevt. for Town Comm'l Ctr on NH1A	HM (24)	✓	✓		
UD29		Redevelopment of SOE factory site	HM, TX	✓	✓			
3. New Development in New Urban Areas	3-1 Ongoing or Committed New Urban Development in Urban Fringe and Suburban Area	UD30	Ciputra urban area development	TH, TL (353)		✓		
		UD31	Cau Giay new urban zone	CG (680)		✓		
		UD32	My Dinh new urban zone	CG, TL (880)		✓		
		UD33	East Nhue new urban zone	TL (600)		✓		
		UD34	Dinh Cong- Linh Dam new urban zone	HM (640)		✓		
		UD35	Den Lu District center development	HM (110)		✓		
		UD36	Viet Hung New Town Development	LB (302)		✓		
	3-2 Van Tri New Town (3,550 ha)	UD37	Dong Anh New Town Development (Phase IA)	DA (2100)		✓		
		UD38	Van Tri new urban housing development with UMRT2	DA (1,435)		✓		
		UD39	Van Tri urban center devt along NH5 extn/UMRT2	DA (68)	✓			
	3-3 Development of Competitive Urban Centers	UD40	Van Tri water front park development	DA (180)			✓	
		UD41	Ho Tay West Area New Devt. in New UMRT Terminal	TH-TL (490)	✓			
		UD42	Gia Lam Airport Urban Center Development	LB (385)	✓			
	3-4 Transportation-oriented Development of Residential Areas	UD43	New Ha Dong Business Commercial Center	HT (75)	✓			
		UD44	Thuy Phuong New Urban Housing Devt. w/ UMRT4	TL (390)		✓		
UD45		Ha Dong New Urban Housing Devt. w/ UMRT2	HT (443)		✓			
UD46		Soc Son New Urban Hsng. Devt. w/ Dong Anh Ind'l Park	SS (1,075)		✓			
UD47		Thach Ban-New Urban Housing Devt. w/ UMRT1	LB (100)		✓			
3-5 Low-density Residential Area Devt.	UD48	Urban Village Improvement	Citywide		✓		✓	
	UD49	Tay Huu urban village improvement	TL (195)		✓		✓	
4. Rural Area Improvement	4-1 Improvement of Community Service Centers in Rural Areas	UD50	Rural service center development	Citywide	✓	✓		
		UD51	Soc Son Rural Area Improvement	SS (3,015)		✓		
	4-2 Craft Village Improvement	UD52	Lien Ha Handicraft Village Area Improvement	DA (810)	✓	✓	✓	
5. Industrial & Logistics Improvement	5-1 Industrial Park Development	UD53	Bat Trang Handicraft Village Area Improvement	GL (87)	✓	✓	✓	
		UD54	Soc Son Airfront Industrial Park	SS (550)	✓			
		UD55	Duong Xa Industrial Park at NH5	GL (360)	✓			
		UD56	Light Industry Park Devt. in Ngoc Hoi at C4-NH1A	TT (64)	✓			
		UD57	Light Industry Park Devt. in Tram Troi at C4-NH32	HT (85)	✓			
		UD58	Light Industry Park Devt. in Van Canh at C4-Hoa Lac	HT (67)	✓			
		UD59	Light Industry Park Devt. in Nhan Trach at C4	HT (87)	✓			
	5-2 Logistics Improvement	UD60	Reg'l Logistic Terminal Devt. in Phu Cuong at NH2-NH18	SS (140)	✓			
		UD61	Wholesale Market ²⁾ East Center at NH5-NH1A	LB (74)	✓			
		UD62	Wholesale Market ²⁾ West Center at C4-NH6	HT (67)	✓			

Source: HAIDEP Study Team

1) CG = Cau Giay, DA = Dong Anh, DD = Dong Da, GL = Gia Lam, HBT = Hai Ba Trung, HK = Hoan Kiem, HT = Ha Tay, HM = Hoang Mai, LB = Long Bien, SS = Soc Son, TH = Tay Ho, TL = Tu Liem, TT = Thanh Tri, TX = Thanh Xu

2) Fresh food and other commodities

14.3 Possible Budget Envelope

It is difficult to estimate the funding capacity of the government for the entire urban sector, since sufficient data to analyze public expenditure on urban sector development in Hanoi are unavailable. In 2001, however, HPC spent 1.3% of its GRDP or roughly VND 500 billion, although it was assumed that much more was spent by the HPC and the central government due to the availability of ODA funds.

In order to provide a possible budget envelope for the city, three scenarios were assumed using various percentages of the future GRDP (see Table 14.3.1). Based on the assumptions that the GRDP will grow at an average annual rate of 11% through 2020 and that 4.0%, 6.0%, 8.0% of it will be allocated for urban sector development, the possible budget envelope for the city between 2006 and 2020 will be US\$ 6.6 billion, US\$ 9.9 billion, and US\$ 13.1 billion, respectively.

Table 14.3.1 Possible Budget Envelope for Urban Sector

Year	GRPD ¹⁾ (US\$ billion.)	Assumed Share of Urban Sector in GRDP (US\$ mil.)		
		4.0 %	6.0 %	8.0 %
2005	4.3	173	260	346
2006 - 2010	4.8 - 7.2	1,189	1,784	2,378
2011 - 2015	8.0 - 12.2	2,005	3,008	4,010
2016 - 2020	13.6 - 20.6	3,378	5,067	6,756
Total (2006-2020)	-	6,572	9,859	13,144

Source: Estimated by the HAIDEP Study Team.

1) An average annual growth rate of 11% through 2020 was assumed.

14.4 Priority Projects

1) Road Projects

Based on the criteria mentioned in the previous section, the final prioritization of projects was conducted by categorizing all 43 transportation project packages into short-term, medium-term, and long-term projects. Figure 14.4.1 presents the future road network by development stage. As a result, there are 13 projects selected for each stage. While long-term projects entail relatively lower project costs, their lengths are the longest. This is because such projects tend to be located in the urban fringe or rural areas. In addition, while estimated project costs may be lower, these can escalate when urbanization has spread to these areas (see Table 14.4.1).¹

Table 14.4.1 Prioritization of Road Projects

	No. of Project Packages	Total Project Cost (US\$ mil.)	Total Length (km)	Average EIRR (%)
Ongoing	1	1,079	66	-
Short Term (~2010)	15	2,761	187	21.5
Medium Term (~2015)	14	2,486	180	19.9
Long term (~2020)	13	1,660	189	18.8
Total	43	7,986	622	21.0

Source: HAIDEP Study Team.

2) UMRT Projects

The proposed development schedule for the 4 UMRT projects and the results of the economic analysis are shown in Table 14.4.2.

- (a) **UMRT 1:** Considering the high EIRR, ridership, and viability of this line, it is essential that this project be prioritized for implementation so as to promote the urban railway system in Hanoi City.
- (b) **UMRT 2:** Although this line's EIRR is not as high as that of UMRT 1, this project is a very important part of the future UMRT network and complements UMRT 1. At the same time, this project needs a long development timeline. Therefore, laying the groundwork for its development should start soon.

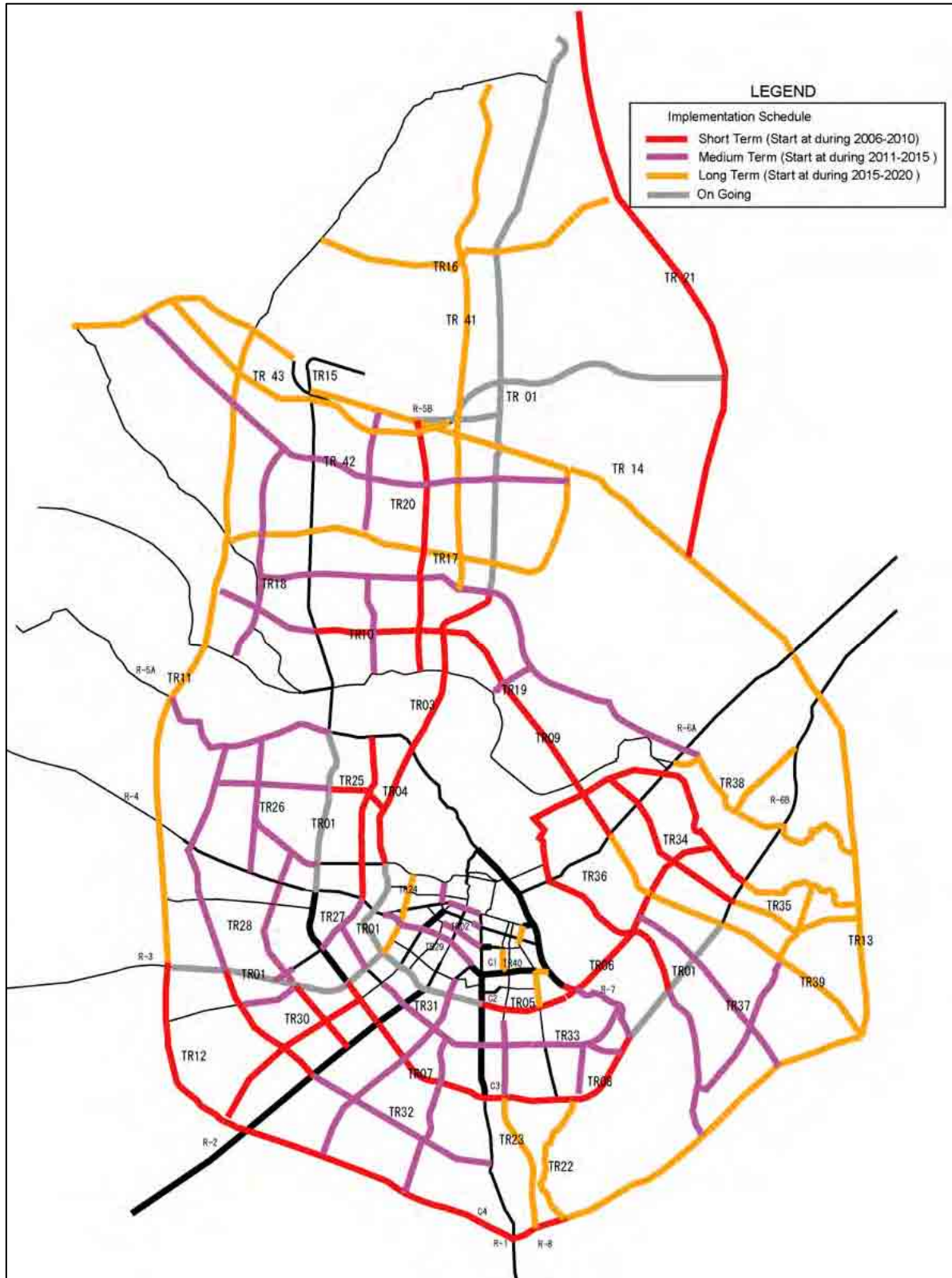
Table 14.4.2 Prioritization of UMRT Projects

Line	Length (km)	Financial Cost (US\$ mil.)	Economic Evaluation			Priority
			EIRR (%)	NPV (US\$ mil.)	B/C	
UMRT Line 1	39	999	19.1	450.3	1.75	H
UMRT Line 2	75	2,522	14.6	772.5	1.54	H
UMRT Line 3	33	1,145	14.3	414.6	1.50	H
UMRT Line 4	53	365	21.5	880.8	3.31	H
All Lines	200	5,031	15.2	2,057.9	1.84	-

Source: HAIDEP Study Team.

¹ Details are discussed in the subsector reports.

Figure 14.4.1 Prioritization of Road Projects



Source: HAIDEP Study Team.

3) Urban Water and Sanitation Projects

Projects identified for the urban water and sanitation subsector were prioritized using several criteria (see Table 14.4.3).

Table 14.4.3 Prioritization of Urban Water and Sanitation Projects

Component	Criterion
Water Supply	1. Urgency (stable supply of water) 2. Necessity (supply of potable water)
Drainage	1. Population density 2. Economic activities
Sewerage	1. Population density 2. Economic and public activities 3. Environmental conservation

Source: HAIDEP Study Team.

Based on each criterion or a combination, projects were prioritized as follows:

- (a) **Water Supply System:** WS-1, WS-3, and WS-5 were prioritized to cope with water demand in the southwest, southeast, and north of Hanoi, respectively up to 2010.
- (b) **Drainage System:** WD-1 was prioritized as an urgent project that has to be completed by 2010. The financial arrangement is under negotiation with JBIC, and it is expected that the project will start in 2006.
- (c) **Sewerage System:** WW-1, WW-2, WW-3, WW-4, and WW-5 were considered urgent. All the projects except WW-4 should be completed by 2010, taking environmental conservation into account.

The next steps toward implementation are as follows:

- (a) **Water Supply System:** The feasibility studies (FS) for WS-1, WS-3, and WS-5 should be started as soon as possible to facilitate their early implementation. It should be noted that even if the feasibility study starts in 2006 the projects will be completed only by 2011 due to the implementation time required.
- (b) **Drainage System:** WD-1 is expected to start in 2006 and complete by 2010. The feasibility studies for WD-2, WD-3, and WD-4 should be conducted before 2010 and project implementation will not be in the first 5 years (~2010) but in the next 5-year period (~2015).
- (c) **Sewerage System:** The feasibility studies for WW-3, WW-4, and WW-5 should be started to facilitate their early implementation and completion until 2010.
- (d) **Solid Waste Management:** No project was identified, but recommendations were prepared (see Table 14.4.4).

Table 14.4.4 Recommended Projects on Solid Waste Management

No.	Project
R-1	Consideration of alternative landfill sites for interregional waste disposal
R-2	Study on the construction of septage treatment plant
R-3	Study on mitigation measures to minimize environmental impact around Nam Son
R-4	Study on use of incinerators
R-5	Study on capacity development on solid waste management
R-6	Revision of master plan based on the results of the 3R Program
R-7	Promotion of community participation in 3R activities

Source: HAIDEP Study Team.

14.5 Summary of Investment Program

1) Investment Cost

The total Investment cost of the HAIDEP subsectors reached US\$ 36,400 million including projects of the central government and those generating revenue or imposing user charges such as public transportation, expressways, ports, airports, water supply, housing, etc. There are also projects which can be implemented based on PPP schemes. Value capture from intergrated developments can also be expected. Thus the funding of the city can be reduced to about US\$ 21,400 million (see Table 14.5.1). Roads require the largest share or US\$ 7,600 million, followed by parks and green spaces (US\$ 5,200), public transportation (US\$ 3,800), and drainage/sewerage (US \$3,100).

Table 14.5.1 Total Investment Cost by Subsector

Sector	Component	Project Cost (US\$ mil.)	Cost to Hanoi	
			%	US\$ mil.
Urban Transportation	Urban Roads	7,993	95	7,593
	Traffic Management and Safety	444	100	444
	Public Transportation (Bus + UMRT)	5393	70	3,828
	Subtotal	13,830	-	11,865
Regional Transportation	Road	4,610	-	-
	Rail	2,582	-	-
	Airport	3,350	-	-
	IWT Port	178	-	-
	Subtotal	10,720	-	-
Urban Water and Sanitation	Water supply	581	50	291
	Drainage	2,085	100	2,085
	Sewerage	1,046	100	1,046
	Flood Control	223	100	223
	Lake Improvement	114	100	114
	Subtotal	4,047	-	3,759
Living Conditions	Housing	2,562	20	512
	Park and Green Space	5,223	100	5,223
	Subtotal	7,785	-	5,735
Total		36,381	-	21,359

Source: HAIDEP Study Team.

Roads, public transportation, parks, and drainage/sewerage systems are basic infrastructures which support urban development for long and require large amount of funding as are experienced by other cities. However, it must be pointed out that the investment cost includes a fairly large amount for lands and resettlement. For example, of the US\$ 7,990 million for urban roads, the share of lands and resettlement is as much as 63% or US\$ 5,050 million. Parks require US\$ 3,480 million or 67% of the investment cost. This implies how critical it is to acquire space for infrastructure development efficiently and effectively. While large funds are required for infrastructure development, it is also true that the value of lands and property increases, various economic development opportunities are created, thereby generating benefits that far exceed investment costs. This also clearly indicates why infrastructure development must be undertaken hand in hand with urban development to lessen social friction due to land acquisition and resettlement as well as to maximize the benefits from infrastructure development.

2) Summary of Investment Program

The projects are consolidated to guarantee the improvement of sector performance due to investments as shown in tables 14.5.2 through 14.5.4 for urban transportation, urban water and sanitation, as well as living conditions, respectively.

Table 14.5.2 Summary of Urban Transportation Subsector Development Program

Key Area	Target	Short-term Measure
Roads	<p style="text-align: right;">US\$ 7,993 million</p> <ul style="list-style-type: none"> • Build efficient network to improve connectivity: <ul style="list-style-type: none"> (a) Widening: 245 km (b) New construction: 351km (c) No of segregated intersections: 43 • Road Ratio: from 4.2% in 2005 to 6/8% in 2020 (City); from 10.3% in 2005 to 18.1% in 2020 (urban core) • Road availability (km/000PCU): from 1.23 in 2005 to 1.30 in 2020. 	<p style="text-align: right;">US\$ 2,760 million (1,079 for ongoing/committed projects)</p> <ul style="list-style-type: none"> • Complete ongoing/committed projects • Construct missing links/bottlenecks • Establish effective mechanism for land acquisition.
Traffic Management	<p style="text-align: right;">US\$ 183 million</p> <ul style="list-style-type: none"> • Establish effective system to ensure smooth and safe movement of vehicles and pedestrians <ul style="list-style-type: none"> (a) Expand traffic control (b) Signalize all major intersections (c) Establish Traffic Control Center (d) Provide sufficient enforcement capacity (e) Establish effective parking system (f) Introduce traffic demand management (TDM) measures Average travel speed (km/h): from 26.0 in 2005 to 35.2 in 2020 	<p style="text-align: right;">US\$ 119 million</p> <ul style="list-style-type: none"> • Upgrade the signal operation system, including left tern signal at major intersections • Promote the development of off-road parking facilities to avoid chaos on roadsides including motorcycle parking on sidewalks. • Separate inbound and outbound traffic flows with physical barriers or introduce one-way street operation • Tighten traffic control and enforcement particularly on compliance with traffic rules, regulations and attitudes.
Traffic Safety	<p style="text-align: right;">US\$ 50 million</p> <ul style="list-style-type: none"> • Protect life and property <ul style="list-style-type: none"> (a) Enhance awareness of the people on safety and traffic discipline (b) Expand safety facilities/measures No. of fatalities: reduce by more than 50% 	<p style="text-align: right;">US\$50 million</p> <ul style="list-style-type: none"> • Eliminate accident black spots in major urban and suburban areas. • Provide grade-separated pedestrian crossing facilities at major intersections where high traffic volumes area observed. • Enhance traffic safety education through a comprehensive traffic safety program to ensure compliance with traffic rules and regulations
Public Transportation	<p style="text-align: right;">US\$ 5,130 million</p> <ul style="list-style-type: none"> • Ensure mobility of all citizens by providing efficient public transportation services <ul style="list-style-type: none"> (a) expand/improve bus transport services (b) construct UMRT network (4 lines with 200km) (c) promote integrated urban and intermodal facilities development Public transportation share: 30-50% 	<p style="text-align: right;">US\$ 532 million</p> <ul style="list-style-type: none"> • Prioritize public transportation • Introduce priority bus transit (PBT) on primary routes. • Expand bys services including feeder buses. • Start land acquisition for UMRT lines. • Deregulate bus operation to promote private sector participation under public sector control.
Pedestrian Environment	<p style="text-align: right;">US\$ 210 million</p> <ul style="list-style-type: none"> • Provide safe and comfortable environment for pedestrians <ul style="list-style-type: none"> (a) Develop integrated pedestrian network (b) Improve/expand sidewalks (c) Plant/preserve street trees (d) Provide street lights and other roadside facilities Urban/district, major urban roads: 100% 	<p style="text-align: right;">US\$ 210 million</p> <ul style="list-style-type: none"> • Establish pedestrian priority areas and control sidewalk activities such as M/C parking, street vending, etc. • Provide safety crossing pedestrians (pedestrian signal) • Enhance people's awareness of pedestrian prioritization policy.

Source: HAIDEP Study Team.

Note: Regional transportation projects, which are not included above, comprise road projects (US\$ 4,610 million), railway projects (US\$ 2,582 million), airport projects (US\$ 3,540 million), and inland waterway projects (US\$ 178 million).

Table 14.5.3 Summary of Urban Water and Sanitation Subsector Development Program

Key Area	Target	Short-term Measures
Water Supply System	<ul style="list-style-type: none"> Supply sufficient clean water for all citizens with improvement of water supply efficiency <ol style="list-style-type: none"> Supply safe and high quality water Shift raw water sources gradually from ground water to surface water Simplify water supply system Program village level water supply in rural areas <p>Water demand and service coverage:</p> <ul style="list-style-type: none"> 1,117x103 m³/day / 94% (2010) 1,663x103 m³/day / 100% 2020) 	<ul style="list-style-type: none"> Completion of ongoing/committed projects Feasibility study and construction of water treatment plants to use surface water with a capacity of 300,000 m³/day in total
Drainage System	<ul style="list-style-type: none"> Protect entire urban development area (UDA) from inundations due to storms <ol style="list-style-type: none"> Start from prioritized areas from viewpoints of population density and high economic activity Develop the system with multipurpose plans for effective land use <ul style="list-style-type: none"> Design storm: 310mm per two days, corresponding to 10-year return period Target area : 18,405ha (south of Red River) and 24,785ha (north of Red River), 43,190 ha in total 	<ul style="list-style-type: none"> Completion of drainage system in To Lich river basin improved under the Drainage Project for Environmental Improvement in Hanoi (stage 2) and North Thang Long area Start feasibility study for other areas
Sewerage System	<ul style="list-style-type: none"> Provide sanitary urban environment and reduce negative environmental impacts to the downstream areas <ol style="list-style-type: none"> Start from prioritized areas from viewpoints of population density, and economic and public activities Develop two levels of wastewater treatment process Develop sewer pipe networks Consider social environment for locating wastewater treatment plants <p>Treatment capacity (at present/2020) : 6,000 m³/day / 872,600 m³/day</p> <p>Population serviced (at present/2020) : 0.04 million/2.9 million</p> 	<ul style="list-style-type: none"> Completion of an ongoing project Implementation of Bay Mau lake improvement project Feasibility studies for other areas, for To Lich and Kim Nguu Rivers, in particular
Lakes and Ponds	<ul style="list-style-type: none"> Ensure expected lake functions such as amenity, landscape and storm water retention <ol style="list-style-type: none"> Prevent encroachment on lake areas Improve amenities in/around lakes Improve water quality Strengthen storm water retention function Establish active management with clear role-sharing <p>Water quality level (L)</p> <ul style="list-style-type: none"> L-1 : COD < 20mg/L (comfortable) L-2 : COD 20 to 35mg/L (standard) L-3 : COD 35 to 50mg/L (polluted) L-4 : COD > 50mg/L (heavily polluted) 	<ul style="list-style-type: none"> Improvement of 12 lakes, in addition to 6 lakes situated in the To Lich river basin and improved under the Drainage Project for Environmental Improvement in Hanoi (stage 2) Study on diversion of environmental maintenance flow as part of water quality improvement
Flood Protection	<ul style="list-style-type: none"> Protect Hanoi from extreme floods/high water in Red and Duong Rivers <ol style="list-style-type: none"> Strengthen and maintain of Red River dykes Assess flood discharge capacity of Red River Study redevelopment of Day River floodway Study flood early warning system <p>Design flood : 125-year return period</p> <p>Design water level : WL 13.4m</p> <p>Freeboard of Red River Dyke : 1.2m</p> 	<ul style="list-style-type: none"> Strengthening Red River dykes for all sections around Hanoi by following the specifications in the 1998 to 2002 project under ADB finance
Sanitation	<ul style="list-style-type: none"> Protect Hanoi from increase of generated waste and costs required for waste collection/transportation and landfill operation <ol style="list-style-type: none"> Reduce generated wastes quantity Introduce effective collection and transportation systems Develop new landfill sites Reduce disposed wastes <p>Waste reduction rate: 30% for disposed waste of 5,376 ton/day (2020)</p> <p>Collection service coverage in UDA: 100% for generated waste of 5,805 ton/day (2020)</p> 	<ul style="list-style-type: none"> Promotion of source separation systems Construction of transfer stations Expansion of the existing Nam Son landfill or finding other landfill sites Promotion of composting, preparation of separation system for recyclable material or consideration of immediate treatment facilities

Source: HAIDEP Study Team.

Table 14.5.4 Summary of Living Conditions Subsector Development Program

Key Policy	Target	Short-term Measures
Housing policy for the poor / near poor (social policy)	<ul style="list-style-type: none"> • Provide low-cost rental housing with minimum size <ul style="list-style-type: none"> (a) Provide rental housing for the poorest level people (the poor) (b) Provide rental housing for the people who cannot afford to acquire housing with minimum size (the near poor) (c) Provide rental housing for factory workers and dormitories for university students <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> Housing demand for the poor: <ul style="list-style-type: none"> • 3,500 units (2010) • 1,600 units (2020) Housing demand for the near poor: <ul style="list-style-type: none"> • 61,800 units (2010) • 28,000 units (2020) Total: <ul style="list-style-type: none"> • 65,300 units (2010) • 29,600 units (2020) </div>	<ul style="list-style-type: none"> • Provide middle or high-rise rental apartments with minimum floor area mainly by the public sector, and the private sector strongly supported by the government by reducing or exempting the land use fees and relevant taxes.
Affordable housing development policy	<ul style="list-style-type: none"> • Provide low/medium-cost housing (affordable housing) <ul style="list-style-type: none"> (a) Provide housing for the social classes who cannot afford to acquire housing at the market prices without housing price control <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> Demand for affordable housing: <ul style="list-style-type: none"> • 19,800 units (2010) • 298,600 units (2020) </div>	<ul style="list-style-type: none"> • Establish the administrative foundations of housing development, including: <ul style="list-style-type: none"> ➢ Establish public institutions to support housing development, ➢ Enact necessary laws/ regulations, ➢ Prepare long-term housing development programs, (Five year housing construction program)
Housing policy to enhance quality of housing and living conditions	<ul style="list-style-type: none"> • Develop high quality housing stocks with good living environment <ul style="list-style-type: none"> (a) Promote development of high quality housing stocks (b) Promote development of good living environment surrounding the housing areas 	<ul style="list-style-type: none"> • Establish guidelines and standards, including: <ul style="list-style-type: none"> ➢ Housing technical standards ➢ Guidelines for housing area development ➢ Laws/ regulations for management and maintenance of apartment

14.6 Proposed Strategic Projects and Actions

The plans and projects discussed in the previous sections, mainly on infrastructure, were incorporated with other policy interventions, as shown in Table 14.6.1, wherein they are more strategically redefined. Key aspects related to implementation, such as timeframe, project nature, possible supporting schemes, and interactions between projects/actions, are specified.

Table 14.6.1 HAIDEP-proposed Strategic Projects

Sector	Projects/Action			Project Component			Support Scheme			Related Projects/Actions		
				Code	Title	Schedule			Infra Services		O&M	Institution
	ST	MD	LT									
A. Regional Development (Regional Role of Hanoi)	PA1.	Develop globally competitive strategic growth corridors				⊙	⊙	⊙	⊙	⊙	⊙	PC1, PC3, PD15
	PA2.	Cross-border transport and regional development				△	○	⊙	△	⊙		PA3
	PA3.	Establish coordinated regional investment promotion program and one-stop center				△	⊙	⊙	△	⊙	△	PA3, PA4, PC1, PC3
	PA4.	Establish regional planning database and management system				△	⊙	○	○	⊙	△	PA3, PA5, PA6, PJ1
	PA5.	Establish regional coordinating councils among northern provinces				△	○	△	△	△	—	PA3, PA4, PA6
	PA6.	Establish planning capacity building institutions on urban/regional development				○	⊙	○	○	⊙	△	PA3, PA4, PA5
B. Urban Development Growth Management	PB1.	Establish development and growth strategy for key urban corridors				⊙	⊙	⊙	⊙	⊙	⊙	PD6, PD9, PH3
	PB2.	Strategic development of new CBD in Dong Anh				⊙	⊙	⊙	○	⊙	⊙	PB1, PD9
	PB3.	Establish strategies, mechanism for upgrading/rebuilding of existing urban areas				⊙	⊙	⊙	△	⊙	○	PD5, PG3, PH3, P11-2
	PB4.	Establish strategies and mechanism for other identified action areas				○	○	⊙	○	⊙	○	PI 1-6
C. Economic and Social Development	PC1.	Establish updated urban economic development strategies and conducive investment environment				—	—	○	—	○	○	PA1, PA3, PJ6
	PC2.	Establish supporting mechanism for SMEs including informal sector				—	—	○	△	○	△	PC6
	PC3.	Establish competitive urban industrial estates/zones				○	○	△	○	○	○	PA1, PA3, PC6
	PC4.	Strengthen capacity and technological linkages of higher education and urban industries				○	⊙	○	○	⊙	○	PC1
	PC5.	Strengthen tourism promotion, infrastructure and services				○	○	△	△	○	○	
	PC6.	Develop effective mechanism to address urban poverty and rural issues				○	⊙	○	○	⊙	○	PC2, PC3, PF1
D. Urban Transportation	PD1.	Establish coordinated mechanism for preparation, monitoring and upgrading of the urban transport master plan				—	○	△	△	○	—	PD2
	PD2.	Develop and conduct capacity building program on transportation planning and management				△	○	△	△	⊙	△	PD1, PJ4
	PD3.	Strengthen traffic management and safety improvement capacity				○	○	△	○	○	△	PD10, PD11
	PD4.	Complete key sections of main roads in Hanoi				○	△	—	○	△	—	PB3
	PD5.	Develop urban roads in integration with urban development				○	○	⊙	△	⊙	○	PB3, PD12

Sector	Projects/Action				Project Component			Support Scheme			Related Projects/ Actions	
	Code	Title	Schedule			Infra Services	O&M	Insti-tution	Funding	TA		PPP
			ST	MD	LT							
	PD6.	Comprehensive improvement /development of sidewalk network and space				○	○	○	○	○	○	PB1, PD11
	PD7.	Expand and improve bus services				○	⊙	○	○	○	○	PD8
	PD8.	Establish clear policy and support measures for paratransits including taxi, xe om and other services				○	○	○	△	○	○	PD7
	PD9.	Integrated development of UMRT network				⊙	⊙	⊙	⊙	⊙	○	PB1, PB2, PD14
	PD10.	Establish comprehensive parking policy and facility development				⊙	⊙	⊙	○	⊙	○	PD3
	PD11.	Comprehensive improvement of traffic environment in CBD				○	⊙	○	○	⊙	○	PD3, PD6
	PD12.	Comprehensive improvement of transportation and urban environment in key corridors				○	○	○	○	○	○	PD5, PH4
	PD13.	Develop water transportation services in Hanoi				○	○	△	○	○	○	PE4
	PD14.	Improve inter-city public transportation services between Hanoi and satellite cities/urban areas				○	○	△	○	○	○	PD9
	PD15.	Improve public transportation services between rural and urban areas				○	○	△	○	○	○	PA1
E. Water and Sanitation	PE1.	Develop surface water resources and related water distribution systems				⊙	○	△	⊙	⊙	○	PG3
	PE2.	Develop drainage systems with multipurpose flood protection reservoir				⊙	○	○	⊙	⊙	△	PE4
	PE3.	Develop sewerage system for the urban core				⊙	○	○	⊙	⊙	△	PG3
	PE4.	Develop water flow diversion system for environmental maintenance of rivers and lakes				⊙	⊙	○	⊙	⊙	△	PD13, PG2, PG3, PI4
F. Housing and Living Conditions	PF1.	Establish policy and institutional framework for sustainable provision of affordable housing				⊙	⊙	⊙	○	⊙	△	PC6
	PF2.	Establish participatory monitoring system of living conditions at community level				△	○	○	△	⊙	○	PG4, PJ1
	PF3.	Improve technical standards for buildings and their maintenance				△	⊙	⊙	△	⊙	△	
	PF4.	Improve adequate mechanism and promote lands and housing supply				△	⊙	⊙	△	⊙	△	PJ3
	PF5.	Establish effective mechanism to promote redevelopment of old public housing areas				△	⊙	⊙	△	⊙	△	PB3
G. Environment	PG1.	Develop comprehensive environmental mapping and information system using GIS				△	○	○	○	⊙	△	PJ1, PJ4
	PG2.	Develop green belts around Hanoi				○	⊙	⊙	⊙	○	△	PE4, PI3
	PG3.	Strengthen urban environmental monitoring system				△	⊙	⊙	○	⊙	△	PE1, PE3, PE4
	PG4.	Develop parks at community level				⊙	⊙	○	⊙	○	△	PF2
H. Urban Design and Landscape	PH1.	Formulate comprehensive landscape guidelines and operate				△	○	⊙	△	⊙	△	PH4, PI 1,2,3
	PH2.	Implement landscape improvement model project along main gateway corridors (e.g. airport, road)				○	○	○	○	○	△	

Sector	Projects/Action			Project Component			Support Scheme			Related Projects/ Actions		
				Infra Services	O&M	Institution	Funding	TA	PPP			
	Code	Title	Schedule	ST	MD	LT						
	PH3.	Implement two model projects for underground space development	■	■		⊙	⊙	⊙	⊙	⊙	○	PB1, PB3 PI1, PI2
	PH4.	Improve tree planting in Hanoi	■	■		△	⊙	△	△	⊙	○	PD12 PH1
I. Special Areas	PI1.	Sustainable development of Ancient Quarter	■	■		⊙	⊙	⊙	⊙	⊙	⊙	PB3, PH1, PH3, PJ6
	PI2.	Formulate and operate development guidelines for French Quarter	■	■		△	⊙	⊙	△	⊙	⊙	PB3, PH1 PH3, PJ6
	PI3.	Improve Thang Long – Co Loa historical, cultural and environmental core zone	■	■		⊙	⊙	⊙	⊙	⊙	⊙	PG2, PH1
	PI4.	Establish effective mechanism for and implement development of outside-of-dyke areas	■	■		⊙	⊙	⊙	⊙	⊙	⊙	PB3, PE4, PJ6
	PI5.	Construct spiritual tower at An Duong		■		○	○	△	○	○	⊙	PJ6
	PI6.	Establish sustainable development mechanism for Ho Tay environmental zone	■	■		○	○	○	○	○	⊙	PE4, PJ6
J. Implementation & Management	PJ1.	Establish and open to the public urban planning information system	■	■		△	⊙	⊙	△	⊙	△	PA4, PF2, PG1
	PJ2.	Improve and operate urban planning institutions	■	■		△	⊙	⊙	△	⊙	△	PJ5
	PJ3.	Develop and adopt alternative urban development methods	■	■		△	⊙	⊙	△	⊙	△	PB1-4 PF4
	PJ4.	Establish and operate urban facilities management information system	■	■		○	⊙	○	○	⊙	○	PD2, PG1
	PJ5.	Develop and implement urban planning human resources	■	■		△	⊙	○	○	⊙	△	PJ2
	PJ6.	Expand and strengthen funding mechanism for urban development	■	■		△	⊙	⊙	△	⊙	△	PC1, PI 1-6

Source: HAIDEP Study Team.

15 IMPLEMENTATION AND MANAGEMENT

15.1 Overview

The overall plan implementation framework is shown in Figure 15.1.1. The plan includes the vision and key strategies that will be implemented through the application of development policies, general development control guidelines, as well as a coordinated urban sector program and projects in the key areas of urban development, urban transportation, urban water and sanitation, and living conditions. This chapter elaborates on some of the recommendations on the institutional arrangements for plan implementation which, among others, include improvements to the statutory urban planning system, urban land development and management, urban sector funding, improvements to the urban planning institutions, and urban sector project assistance. The overall institutional framework is aimed at promoting the government as an enabler of urban development and services and not merely as a provider. As Vietnam progresses toward a market economy, Hanoi City should pave the way for the private sector to be more actively involved. Key to this is to encourage public-private partnership in urban development and service provision.

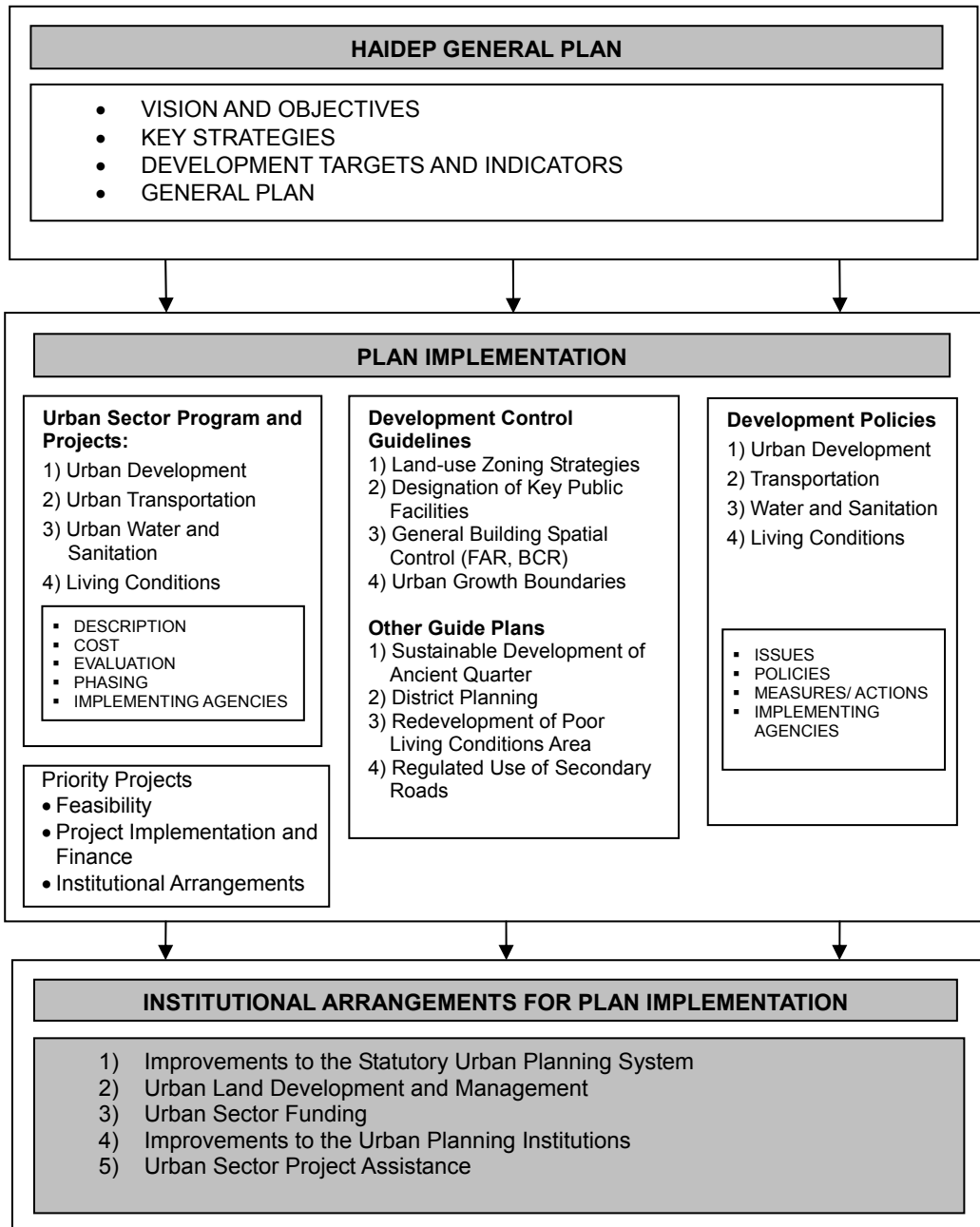
There are several institutional initiatives proposed in this study. These proposals were derived from various sources, as explained below.

Box 15.1.1 Bases for Proposed Institutional Initiatives

1. Comparative studies of urban planning and development systems of Vietnam, Malaysia, and Japan. Selected references were also made to planning systems in the UK, Australia, and US. The comparative studies help identify key institutional deficiencies within the existing urban planning and development system in Vietnam. The technical report on the institutional aspects covered the following:
 - Part 1: Institutional Framework for Urban Policy in Hanoi, covering aspects on urban administrative structure, planning system, and land management system.
 - Part 2: Institutional Framework for Urban Planning, including an overview of the development planning system of Vietnam, Japan, and Malaysia.
 - Part 3: Land-use Zoning Control.
 - Part 4: Urban Sector Funding.
 - Part 5: Land Administration and Land Management in Hanoi.
2. Urban sector recommendations in the HAIDEP Study and sector technical reports with respect to urban development, transportation, water and sanitation, and living conditions.
3. Selected case studies and background research on existing situations in Hanoi. These may be reviewed in the technical reports. Nine case studies were carried out to identify existing issues regarding urban development planning and management in Hanoi.
 - Case Study 1: Institutional Aspects of District Plan Making: A case study of Dong Anh District.
 - Case Study 2: Managing Land-use Change (Development Control) along a Road Corridor: A Case Study in Le Van Luong Road, Thanh Xuan District.
 - Case Study 3: Industrial Investment Project: A Study on Approval Processes and Development of Large-scale Industrial Projects in Hanoi.
 - Case Study 4: Housing Development Project (public-private joint venture project): A Case Study on Ciputra, Tay Ho District.
 - Case Study 5: A Road Construction Project Involving Resettlement: A Case Study in Co Loa Area, Dong Anh District.
 - Case Study 6: A Small Housing Project Involving Agricultural Land: A Case Study in Ao Dinh, Phu Thuong, Tay Ho District.
 - Case Study 7: Individual House Construction Involving Subdivision of Land and Building: A Case Study in Quan La Xa Village, Xuan La Ward, Tay Ho District.
 - Case Study 8: Change of Building Use from Residential Use to Commercial Use (shop): A Case Study in Nghia Do Ward, Cau Giay District.
 - Case Study 9: Development of Small and Medium-sized Industrial Enterprises in Hanoi.
4. Discussions with counterpart officials, international consultants, and other relevant stakeholders.
5. Relevant responses from the Steering Committee on the initial proposals made in the Interim Report.

Key technical assistance initiatives have also been translated as project profiles for possible technical assistance.

Figure 15.1.1 Overall Plan Implementation Framework



15.2 Improvements to the Statutory Urban Planning System

An effective statutory urban planning system is necessary to ensure the sustainable development of the city. Urban planning systems should be responsive to market changes and provide strategic guidance on urban expansion and land-use management. While traditional urban master plans were drawn up primarily for construction purposes, there is a need for Vietnam to develop a suitable urban planning system to manage urban growth and development more effectively as the private sector is expected to play a more dominant role as initiator of urban development in the future. Some of the key recommendations to this effect made in this study are as follows:

- (i) Introduction of a hierarchy of statutory urban plans, i.e. general plans, district plans (type 1 detailed plan), and action area plans (type 2 detailed plans).
- (ii) Land-use zoning system and the application of use class tables to guide land-use development.
- (iii) Introduction of urban growth boundaries to manage urban expansion and control urban sprawl.
- (iv) Introduction of a planning permission system to complement the existing construction permit system.
- (v) Introduction of subdivision regulations for land and buildings that could be enforced through the planning permission and construction permit systems.

These proposals are further elaborated below.

1) Hierarchy of Statutory Urban Plans

The HAIDEP Master Plan proposal calls for a review of the existing statutory urban plan's form and content. The existing urban planning system follows a prescriptive approach that is too rigid to accommodate changes brought about by the market economy. It is more oriented to construction planning rather than serve as an effective plan to manage the use, development, and conservation of land and buildings. The proposed statutory urban plans for the city are; (i) General Plan, (ii) District Plan, (iii) Action Area Plans (see Table 15.2.1). The action area plans should also be differentiated from the detailed layout submission plans which are done by the investor/developer in order to obtain planning permission/ construction permits. The form and content of the urban plans will have to be examined further and elaborated in a manual. The general plan should be the strategic framework for the preparation of the lower-tier plans (i.e. district and action area plans). The enforcement of land-use zoning should preferably be done in the lower-tier plans as these plans are done on a cadastral/ topographic base. The provisions of the statutory urban plans will be used as material consideration under the planning permission system.

Key Initiatives:

1. Initiate discussions with HAUPA (HPC) and DAP (MOC) on suitable statutory urban plans for Hanoi.
2. Undertake a pilot project on district planning and action area plans.
3. Technical assistance in the preparation of a manual on the form and content of general plans, district plans, and action area plans.
4. Amend the law where necessary.

Table 15.2.1 Proposed Hierarchy of Urban Plans

Type of Statutory Urban Plan	Coverage	Purpose	Form and Content
1. General Plan	Whole city area	<ul style="list-style-type: none"> • Guide and manage the use, development, and conservation of land and buildings. • Coordinate citywide urban infrastructure development. • Identification of urban growth boundaries • Designate key (citywide) public facilities. 	<ul style="list-style-type: none"> • The plan is a written statement supported by maps ranging from 1:10000 to 1:25000, diagrams, and other illustrations. It is written in the form of a strategic development plan that is vision-led and establishes development strategies and broad targets of growth and would contain, inter alia: <ul style="list-style-type: none"> (i) Development policies/ proposals by urban sectors (ii) Land-use structure plan and general development control guidelines (iii) Urban sector program and projects (iv) Designation of action areas
2. District Plan (A combination of District General Plan and Urban Detailed Plan Type 1)	Whole district	<ul style="list-style-type: none"> • Translate the General Plan in greater detail. • Development control purposes. • Demarcation of urban growth boundaries. • Demarcation of key public facilities and infrastructure reserves. 	<ul style="list-style-type: none"> • The plan is also a written statement supported by maps, diagrams and illustrations. The maps are usually prepared on a survey /cadastral base and may range from 1:2000 to 1:15000. • Development proposals by urban sector: <ul style="list-style-type: none"> (i) Development control maps including detail land-use zoning, density zoning, and building spatial control (FAR, BCR and height control) (ii) Urban sector program and projects. (iii) Designation of action areas.
3. Action Area Plans (Detailed Plan Type 2)	Growth areas/ conservation areas	<ul style="list-style-type: none"> • Regulatory plan for the implementation or management of urban development projects. 	<ul style="list-style-type: none"> • The plan contains maps supported by written statements. The maps are prepared on a survey base containing cadastral and topographic information and may range from 1:500 to 1:5000. • The plan is prepared for action areas identified in the General Plan and the District Plan: <ul style="list-style-type: none"> (i) Layout plan showing land use, land parcels, property lines, building setbacks. (ii) Designation of buildings and trees to be protected. (iii) Infrastructure and utility plans.

2) Introduction of a Land-use Zoning System and Use Class Tables

The HAIDEP Master Plan has proposed the introduction of a land-use zoning concept which if accepted by the authorities can be enforced in the district plans of the city. The land-use zoning plan is often used as a land-use management plan to guide the city's future land-use development. The types of building activities that are permitted in each of the land-use zone are usually guided by the use class tables. There are various formats of use class tables. Principally, however, they contain the following information:

- (i) Demarcation of the land-use zone on the map.
- (ii) Main development objectives of the zone.
- (iii) Permitted building uses.
- (iv) Conditional building uses.
- (v) Building uses not permitted in the zone.

The use class table can be effectively applied at the planning permission stage to control building uses. They may also be used by the Business Licensing Department in ensuring compatible land-use development.

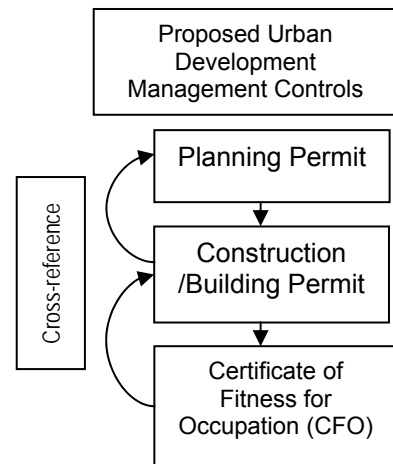
Key Initiatives:

1. Initiate discussions with DAP of MOC on the introduction of land-use zoning concept in urban planning.
2. Technical assistance in preparing land-use zoning guidelines and use class tables for Hanoi.

3) Planning Permission and Submission Requirements

Urban development management control in many cities is achieved through the application of three stages of controls, namely: (i) planning permission, (ii) building plan approval, (iii) certificate of fitness for occupation (CFO) with feedback/cross-checking system to ensure compliance. In Vietnam both the planning permission system and the issuance of CFOs are lacking, often resulting in building construction that is not in conformity to the approved plan. While building plan approval and CFO are part of the architectural control on buildings, planning permission is usually applied as part of the urban planning development control mechanism. The current construction approval process involves several stages depending on the type of development project. Some of the main stages are: (i) site introduction and planning certification, (ii) investment license, (iii) LUR and land lease approval, and (iv) construction permit. It is possible to consolidate some of the preconstruction permit approval stages into the planning permission system especially if the project only needs the approval of the HPC.

Figure 15.2.1 Stages of Control



In Hanoi, planning control is currently applied through the process of planning certification for areas with detailed construction plans and planning agreements for areas without detailed plans. Some of the main criticisms of the present approach are:

- (i) The current system of planning control (both planning agreement and planning certification) requires the availability of updated detail plans. In fast growing economies many of the detail plans go quickly out of date and require extensive resources to prepare them.
- (ii) The current system of obtaining planning certification/ agreement only applies to construction activities and does not apply to managing land use change and subdivision which are decided by HPC and DONRE respectively under different guidelines.

- (iii) The conditions of planning control under the present system are limited to technical requirements. Other relevant conditions could include planning directions of higher planning authorities, EIA and EMP conditions, urban design and landscape guidelines, objections from adjoining landowners where relevant, provision of public facilities and affordable housing policies and other HPC policies etc.
- (iv) Planning approval is not clearly spelled out as a formal requirement under the Construction Law 16/2005/TT-BXD although it is applied in the special cities of Hanoi and HCM under previous decisions, e.g. HPC Decision 109/2001/QD-UB which is currently superseded by HPC Decision 28/2006/QD-UB.

The planning permission system is a unique development control concept that is applied in many countries. It is an effective system to not only manage construction activities but also land-use change and land subdivision. It is a process whereby the requirements of the various city departments can be coordinated effectively as the development application is sent to all the relevant technical departments for their appraisal. Under the Commonwealth (British) planning system all development (unless exempted) require planning permission before proceeding with building /construction plan approval. Planning permission is normally required for all development activities which include:

- (i) Construction activities including building, engineering, industrial operations etc
- (ii) Material Change of use of land and building
- (iii) Subdivision and amalgamation of land

A system of planning permission is proposed to be introduced as part of the urban planning system in Hanoi to complement the existing construction permit system. Situations where planning permission is required are shown below. The city may also prescribe development activities that are exempted from obtaining planning permission.

Generally the development proposal by the investor/applicant has to conform to:

- Approved Urban Development Plan (General Plan, District Plan, etc) of the city
- Planning Conditions imposed under the planning permission system.

Key Features of the Proposed Planning Permission System for Hanoi:

1. Planning permission is given by the Hanoi People's Committee (HPC) and issued by the Town Planning Department (HAUPA).
2. Application is made to a one-stop center the city (Could be established as an office under HPC or under HAUPA).
3. Applications to be reviewed by a town planning committee comprising relevant technical departments and chaired by the Chairman of HPC. The secretariat to be provided by HAUPA.
4. Situations when planning permission are necessary:
 - (i) New urban construction/ development application of a certain land area or floor space as prescribed by HPC.
 - (ii) All new subdivisions of land and buildings.
 - (iii) Change in land-use zoning or purpose from agriculture to residential / urban use.
 - (iv) All construction projects that require investment license.
 - (v) Any other situations as prescribed by HPC. The city may also prescribe development activities that are exempted from planning permission from time to time.

Planning permission is given by the city and may be issued with or without conditions. The application is normally made to a one-stop center within the city administration which is responsible for distributing the applications to the various technical departments and compiling the relevant comments from them. These comments are coordinated by the Town Planning Department of the city and reviewed by a Town Planning Committee (TPC) which gives written directions to the applicant to amend his drawings / proposals within a prescribed time. The amended drawings are resubmitted to the city and reviewed by the TPC which forwards its recommendation to the City Council which issues planning permission for the development or rejects the application. Some of the considerations that the city may take into account before issuing planning permission are shown in Figure 15.2.2. The planning permission system ensures that all the planning and design guidelines are complied with, while the city is also in a position to impose planning conditions to secure public facility land and ensure payment of development charges. The planning permission system can be carried out even if there is no Detailed Plan.

As Hanoi already has a Construction Permit system, the requirement for planning permission could be applied for land development applications involving more than 500m² of land area or building construction involving more than 200m² floor space. For individual house construction, as long as the development conforms to the approved Urban Construction Plan of the city and the relevant building code, they can be exempted from applying for planning permission but will have to obtain the Construction Permit as stipulated under the Construction Law. All relevant authorities will have to ensure that planning permission is obtained before they give their respective approvals. The typical planning permission process as applied in Malaysia is shown in Figure 15.2.3.

The procedure for planning approval will generally involve the following stages:

- (i) Conceptual consultation phase involves preliminary consultation with the city wherein planning standards and opinions of the town planner are obtained. This process is optional and not binding on either party.
- (ii) Filing of the application together with the required documents, layout plans, and reports.
- (iii) Referral of application to the various technical departments.
- (iv) Written directions to the applicant to amend the plan.
- (v) Hearing of objections from adjoining land owners in specific situations especially if it involves changes in land-use zoning.
- (vi) Decision on the application (planning permission with or without conditions/rejection of the application).
- (vii) Endorsement of the layout plan and the issuance of planning permission to the applicant.
- (viii) Appeal by the applicant where necessary.

Application for planning permission is usually made by a qualified consultant town planner on behalf of the land owner. The submission requirements for planning permission may vary with different local authorities. Some of the larger city authorities require submissions to be made in electronic submission format. A typical submission checklist as per requirements in Putrajaya is shown in Box 15.2.1.

Key Initiatives:

1. Initiate discussions with DAP (MOC) and HAUPA (HPC) on the introduction of a planning permission system for Hanoi.
2. Study visits to countries that have adopted a planning permission system.
3. Training for planning officials involved in development control.
4. Technical assistance in formulating a planning permission system for Vietnam.
5. Amendment to laws to accommodate a planning permission system.

Figure 15.2.2 Considerations in Granting Planning Permission

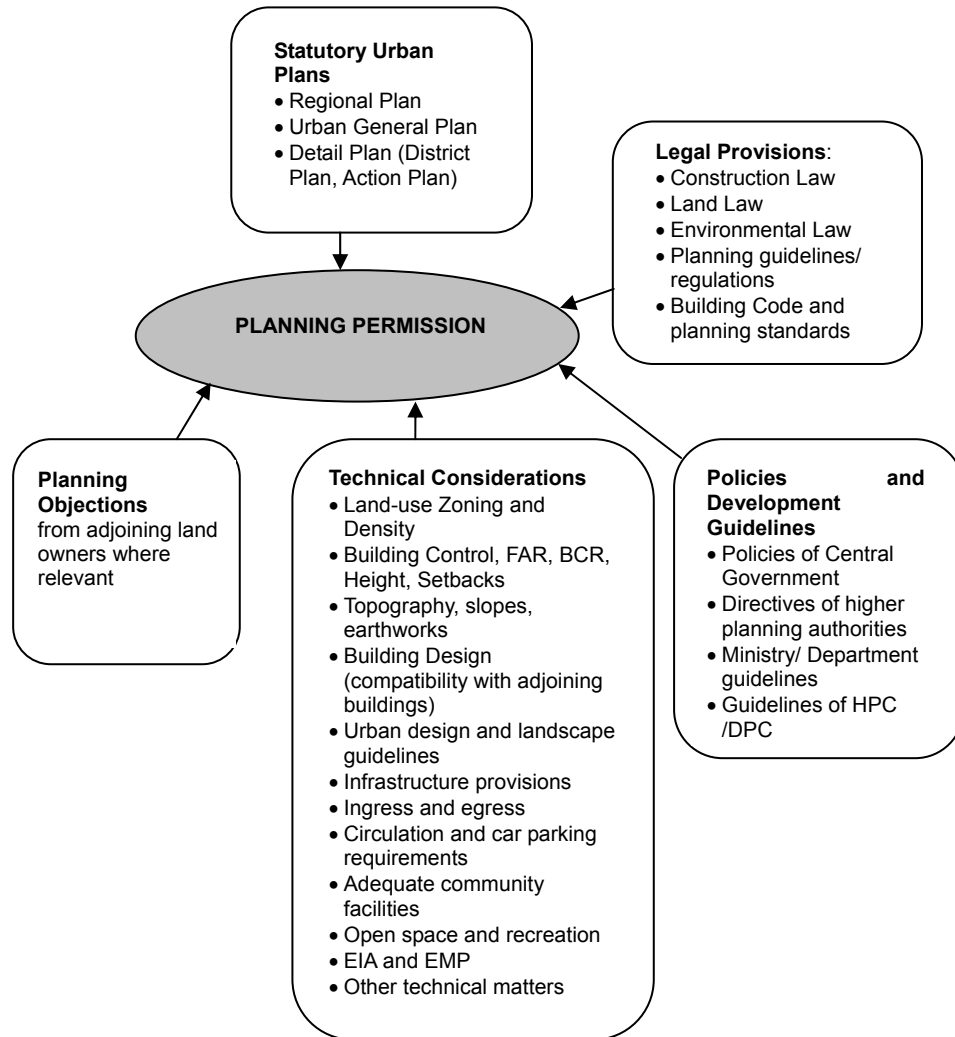
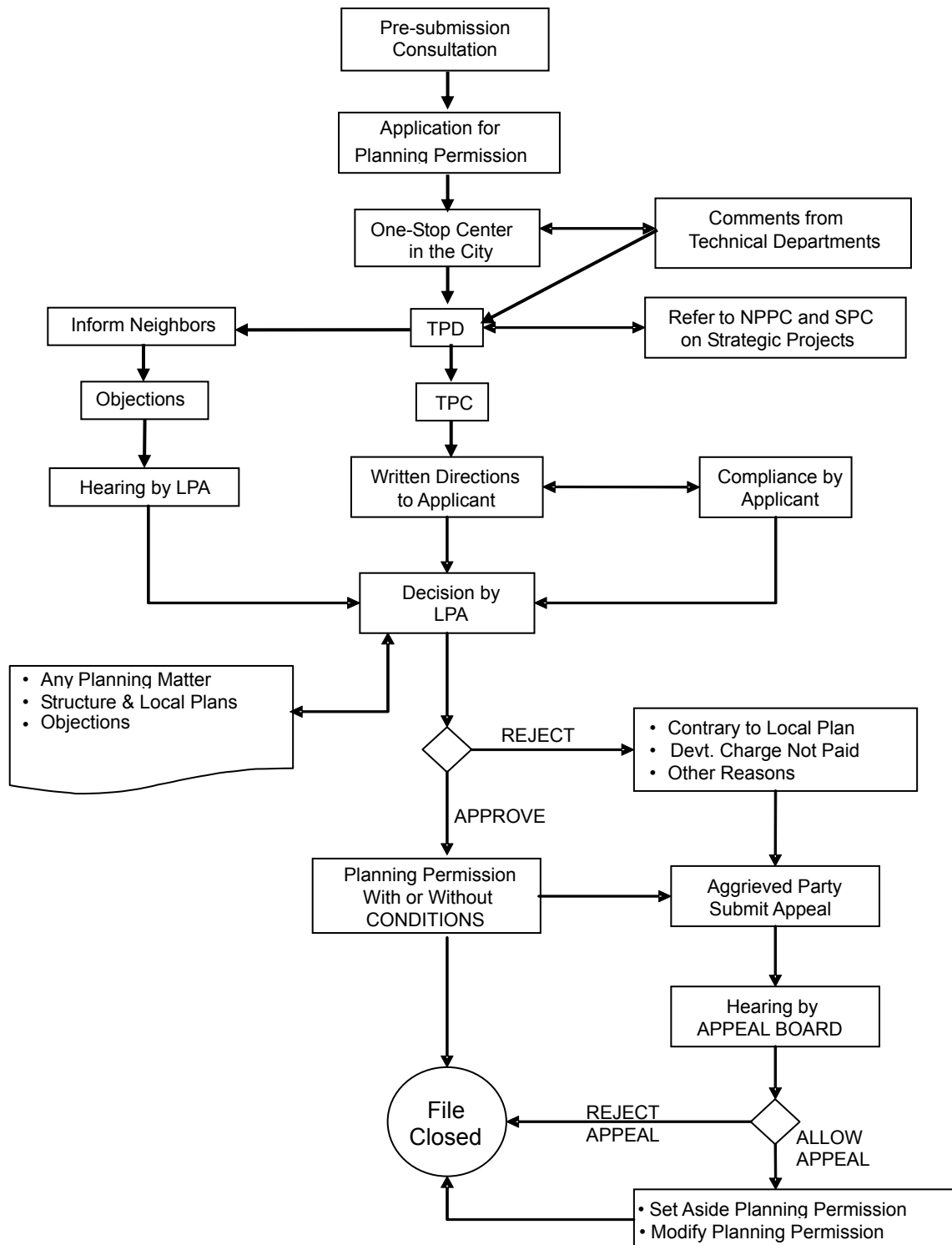


Figure 15.2.3 Example of a Planning Permission System



Box 15.2.1 Example of Submission Checklist for a Planning Permission for a Layout Plan Approval

The submission checklist for applying for planning permission for Layout Plan approval (Putrajaya, Malaysia)

1. Cover letter of consultant planner
2. Completed Application Form
3. Copy of land title
4. Letter of appointment of consultant planner
5. Planning Proposal Report as required under the Town and Country Planning Act prepared in A3 format and endorsed by the consultant planner. The contents of the report are prescribed by the city planning department which include, among others, site information, site analysis, development proposal concept and justification particularly with respect to impacts on utility, transport, landscape, urban design, environment, and surrounding land use; Detailed layout plan; Supporting reports as required, i.e. geotechnical report, earthworks report, traffic impact assessment, drainage, utility plan, environment management plan (emp), social impact assessment, phasing of development, estimated selling price of property.
6. Following plans prepared on a survey base (pre-comp base) in A1 format and endorsed by relevant consultants who prepared them. These plans are also prepared in A3 format to be included in the Planning Proposal Report.
 - (i) Layout and Land-use Plan endorsed by the consultant planner and land owner.
 - (ii) Slope Analysis Plan.
 - (iii) Tree and Vegetation Inventory.
 - (iv) Landscape Concept Plan.
 - (v) Earthworks Plan.
 - (vi) Infrastructure and Utility Plan on the following:
 - Circulation Plan (traffic, buses, pedestrians)
 - Drainage
 - Sewerage
 - Electricity
 - Water Supply
 - Telecommunication
 - Gas
 - Solid waste collection
7. Perspective Plan (Bird's Eye View).
8. 3D Model (Computer and Scale Model).
9. Comments and written response from utility agencies and companies such as water supply company, telecoms, solid waste company, sewerage company, gas company, electricity company, and fire department.

Source: Submission Checklist Putrajaya Corporation, Malaysia.

4) Securing Public Facility Land

One of the primary purposes of statutory urban planning is to secure key public facility lands for the community. In cities that have high urbanization rates, it is important to secure in advance adequate land for public facilities. Public facility land includes land for roads, parks, sewerage, hospitals, railways, schools, etc. Some of the ways used within the urban planning system to secure public facility land are as follows:

Key Initiatives:

1. Designation of suitable sites and their inclusion in the city's Urban Development Plan.
2. Identification of city planning roads (arterial roads) in the Construction Plan that would be funded by the government.
3. The introduction of new urban development methods, such as land readjustment, and growth management techniques such as transfer of development rights (TDR);
4. Get developers to contribute land for public facilities under the planning permission system;
5. Providing development incentives to developers to provide public amenities; and
6. Developers to pay development charges for improved land values, in lieu payment for non provision of facilities, and contribution to the Infrastructure Service Fund.

- (a) **Designating suitable public facility land in the City's Urban Development Plan:** This is probably the most effective way of securing large public facility land in advance of urban development. Wherever possible these sites are earmarked on government owned vacant land. Close interface with the agency in charge of the facility is required to ensure that the land will be utilized within the plan period.
- (b) **City Planning Roads:** These are arterial roads identified in the city plan which is usually developed by the government. The construction of these roads is important to release adequate land to the urban land market. The construction of these roads also helps to prioritize and phase urban development towards particular areas of the city. City planning roads are often funded by the State.
- (c) **New Urban development methods and growth management techniques:** There are also special urban development methods that can be utilized to secure public facility land. One of the most effective methods applied in Japan is Land Readjustment (LR) . Under the LR system, all participant land owners contribute a portion of their land for both public facility land and financial land (commercial, industrial or housing land) that is sold in the open market to help finance the project. Transfer of development rights (TDR) is another sophisticated growth management technique that is applied in many developed countries to provide protection for heritage buildings and urban conservation areas. Under TDR, the landowner of the heritage building site sells his development rights (FAR) to another developer of land within the locality. This is to offset his loss of keeping his property as a heritage building. Most of these methods will however require new regulations to be passed.
- (d) **Developers to contribute public facility land and low cost housing as part of the planning permission system:** Under the planning permission system, the city may impose directions/ conditions on the developer to provide adequate public facility land. In addition to roads and open space, developers of new residential areas have to provide land for schools, places of worship, community halls, utility reserves etc. according to planning standards. Some of these facility lands may be surrendered to the city through the application of land subdivision regulations or they may be sold to the respective utility / government agency at nominal values. The planning permission system may also be used to compel developers to provide low income housing. In Malaysia as part of the planning policy on affordable housing, housing developers have to provide at least 30% of the total units of their project as low cost housing for the low income group. The selling price of the low income housing is regulated by the government.
- (e) **Development Incentives to land developers:** In many developed countries, developers of land are also given development incentives in the form of bonus plot ratios (FAR) for urban development projects that provide for public amenities such as public plaza, improved streetscape, street sculptures and amenities in public space.
- (f) **Development charges:** Development charges are applied as an urban planning charge that is imposed on the developer at the time of applying for planning permission. The development charge includes payment for the improved value of land as a result of rezoning or increased densities given to the land owner as a result of revisions / amendments to the statutory plan. Development charges are also collected by the city as in lieu payments for non provision of facilities such as car parking areas and school sites as required under the planning standards. The developer also contributes

to the Infrastructure Service Fund in lieu of constructing the necessary public facilities such as roads, drainage, landscape and sewerage especially if such facilities are constructed by the government. The funds are used by the city to provide the necessary public facilities in a coordinated manner.

5) Formulating Comprehensive Planning and Design Guidelines and Regulations

There is also a need for comprehensive planning and design guidelines to assist city planners in the planning permission process as well as in preparing development plans. Complementing this is the need to review Part II (Construction Planning) regulations under the Vietnam Building Code to make the standards more current with existing requirements. Some of the main planning and design guidelines should include the following:

- (i) Environmental impact assessment guidelines by prescribed activities (Under the Law on the Protection of the Environment 1993, there is a need to prepare an EIA for certain prescribed activities.) and the preparation and assessment of Environmental Management Plans (EMP) detailing environmental mitigation measures to be taken during the construction stage.
- (ii) Urban design and landscape guidelines;
- (iii) Tree preservation order and guidelines (Current practice is to use Circular 20/2005/TT-BXD on the Guidelines on the Management of Urban Trees –MOC)
- (iv) Vehicle parking standards for all new development;
- (v) Regulations regarding heritage buildings and conservation areas;
- (vi) Advertisement guidelines (Current practice is to use Decision 10/2001/QD-UB dated 2001 issued by HPC)
- (vii) Storm water management guidelines;
- (viii) Earthworks and sediment control guidelines;
- (ix) Solid waste collection and separation guidelines; and
- (x) Review of existing planning standards in the Vietnam Building Code (community facilities, open space, density and intensity controls, building setbacks, etc.).

Key Initiatives:

1. Technical Assistance in preparing the planning and design guidelines
2. Technical Assistance on preparing EIA guidelines by prescribed activities and Environmental Management Plans (EMP)
3. Review of regulation and guidelines on water quality, storm water management , separation and recycling of solid waste and waste water systems

6) Enhancing Public Participation in Plan Preparation

Public participation is an important component of the preparation process of the city plan. The process of public participation is also codified in many planning legislations. While the Vietnam's Construction Law provides for a requirement to consult relevant individuals and organizations while preparing the plan, this duty is not extended to the public. The public are the key stakeholders in any city plan, and every effort and opportunity must be given to the public to allow them to give their opinions about, and inputs to, the plan. Public participation is especially important in both the preparation of the urban construction general plans as well as the Detail Plans. Usually, public participation in other countries is provided at two stages of the plan-making process:

- At the preliminary plan stage where the analysis of the survey is reported (Report on the Survey Stage).
- After the draft plan is prepared (Draft Plan Stage).

The government may also set up an Inquiry panel to hear public objections and make recommendations to the approving authority to direct the city to amend the draft plan if necessary. The city has to make a report on how it addressed public comments and objections and submit it as part of the dossier to the approving authority. It is only after the extensive public participation process that the plan is eventually approved and becomes legally binding.

Key Initiatives:

1. Conduct demonstration projects involving participatory approaches in general planning, district planning and action planning
2. Examine the possibility of introducing planning appeal tribunals and planning inquiry panels as part of the urban planning system in Vietnam
3. Amend laws where necessary to enable greater public participation in plan making

7) Formulating Comprehensive Provisions on Urban and Regional Planning

Currently, urban planning is carried out using the Law of Construction 2003, while land-use planning is provided for in the Land Law 2003. This requires close integration between the two planning systems to ensure a coordinated urban plan. It may also be necessary in the future to consolidate the two planning systems under an urban and regional planning law. Alternatively, the provisions on urban and regional planning could be expanded in the existing Construction Law. Such a law should be comprehensive, providing for all aspects of planning the use, development, and conservation of land and buildings; the type of development plans ranging from national physical plans, regional plans, urban development plans, district plans to action area plans; urban growth boundaries, urbanization development and control areas, land readjustment, development control, public participation, enforcement and penalties, as well as appeals procedures. A coordinated urban and regional plan should serve as the basis for infrastructure and urban development investment planning.

Key Initiatives:

1. Review the construction planning system under the Construction Law and the Land-use Planning System under the Land Law and examine the need for a consolidated law on urban and regional planning
2. Technical Assistance on a Comprehensive Law on Urban and Regional Planning for Vietnam

15.3 Urban Land Development and Management

Key initiatives should be taken to improve urban land development and management to enhance the overall economic efficiency of the city. Some of the main proposals to this effect are explained below.

1) Introduction of Subdivision Regulations for Buildings and Land

There appears to be very little control on the subdivision of land and buildings especially in the urban fringes. Subdivision of land involves the division of any plot of land into two or more allotments under separate land titles. Land owners continue to subdivide their land as inheritance for their children or sell the subdivided portion to finance reconstruction of their house. In the process unofficial cul de sacs are created which further worsens the haphazard road network. On the whole the urban planning system has not been effective in controlling land subdivision and illegal conversion of land from agriculture to residential use. A recent decision by HPC 28/2006/QD-UB states that sites less than 15m² with a frontage less than 3m will not be issued with Construction Permit.

The substantive law on subdivision control may be found in various laws either as part of the planning laws of the country, or in the land laws or as a separate ordinance in itself. The most comprehensive form of subdivision regulations are applied in the United States whereas in the Commonwealth countries, the control of subdivision of land and buildings is achieved through the planning permission process. Generally, the main legal provisions relating to subdivision of land are:

- (i) The subdivision must conform to the statutory urban development plan of the city;
- (ii) Approval of the planning authority (planning permission) must be obtained before subdivision can be carried out;
- (iii) The minimum area of the allotments appropriate for the purpose intended and shape of the allotment shall be ascertained by the planning authority;
- (iv) A satisfactory means of access road is provided to each allotment as approved by the planning authority;
- (v) Agreement from the land owner that he will surrender the designated public facility land including roads, open space to the city for public purpose;
- (vi) No items of land revenue to the state are outstanding at the time of making the application; and
- (vii) All encumbrances on the land such as mortgage/ lien / lease are discharged or the beneficiaries of the above rights have consented in writing to the making of the application.

The submittal requirements for major subdivisions are shown in Box 15.3.1. Some of the submittal requirements may be waived for minor subdivisions.

Similar to regulations on land subdivision, there is also a need for regulations on building subdivisions in Vietnam. A subdivision of building arises when the building on same plot of land is subdivided into different parcels. This situation is quite rampant in Hanoi where there are many flatted development as well as the practice of subdividing existing houses and selling parts of the building especially in the down town area merely under common contract. Building subdivision has to be regulated by a Strata Titles Act or Regulations on Building Subdivision. The law should also include the setting up of a Management Board for all subdivided buildings especially to manage the common property and the building in

general after the developer has handed over the project

Box 15.3.1 Submittal Requirements for Major Subdivision Proposal

1. Completed Application Form
2. Written authorization from land owner
3. Site Plan showing the proposed subdivisions including street right of ways, open space, location plan etc.
4. Planning report including impact assessments. The study should assess the availability and impact upon:
 - Water service
 - Sewer service
 - Schools
 - Fire Protection service
 - Parks and Recreational Facilities
 - Streets and access
 - Police protection service
 - Solid waste disposal
 - Visual impact of land clearing and construction etc
5. Maps such as Topographic Map, Soils Map, Utilities Map, Drainage map
6. Erosion and sediment control map and report
7. Drainage and Hydrology Report
8. Road profiles and cross sections
9. Permits and approvals of Utility Companies
10. Agreements by the land owner to surrender public facility land to the city.
11. Any other information that the planning authority requires.

Note: Major subdivision include subdivision of 4 or more allotments whereas minor subdivision is 3 or less.

Key Initiatives:

1. Prepare an issue paper on the extent of subdivision activities in Hanoi
2. Technical Assistance in preparing guidelines/regulations on the subdivision of land and buildings
3. Enforce these regulations through the planning permission system

2) Introduction of Urban Growth Boundaries

Urban Growth Boundaries are introduced to guide urban expansion, control urban sprawl and protect agriculture lands. Generally urbanization is encouraged within the urban growth boundary while urban development is strictly controlled outside this boundary. UGBs are important to prevent urban sprawl and protect natural conservation areas such as green belts and high productive agriculture land. UGBs should preferably be physically identifiable such as roads, rivers, wetlands, forest areas etc. wherever feasible. This will assist in the overall monitoring of plan implementation. The UGBs should also be reviewed with the review of the Urban Construction General Plan. The UGB area for Hanoi is expected to cover an area of 55350ha (see Figure 15.3.1), which is more than adequate to accommodate urban development needs up to 2020. For the initial period it is

Figure 15.3.1 Urban Growth Boundaries



proposed that UGBs are used as a planning tool to guide and control development. Once there is general acceptance to the concept, it may be institutionalized as a land management tool whereby appropriate land taxation policies could be imposed. In Japan, properties within the UGBs are subject to higher property taxes to encourage urban land-use conversion.

Key Initiatives:

1. Initiate discussions with DONRE and HAUPA on the establishment of UGB for Hanoi.
2. Apply strict urban development controls for areas outside the UGB
3. Promote urban development applications within the UGB
4. Initiate discussions with DPC to demarcate the UGB in the district plans
5. In the long term, initiate policies on differential urban landuse taxation for areas within and outside the UGB .

3) Improvement of Land Information System for Efficient Land Markets

There has to be greater efficiency and transparency of land markets. Property market information should be regularly compiled so as to better establish market values. For example in Malaysia, the Valuation Department prepares Annual Property Market report and information on housing and property stock on a regular basis. The current official prices of the government are also criticized for being too low, while some of the unofficial transacted prices may be speculative in nature. Many real estate/land-use transactions are also not registered presumably to avoid paying taxes which is compounded by the relative ease under the present system to transfer land without formal legal title. It is quite common for land-use right to change several hands before it is registered. Registration of land dealings especially land transfers are not only important to offer protection for the purchaser/ mortgagee but also an important source of tax revenue and an important basis for developing a market value for land and property. Additionally regular housing census and updating of housing stock are also important in formulating an effective housing policy for the city.

Key Initiatives:

1. Technical Assistance in Urban Land Valuation
2. Annual Property Market reporting by Valuation Dept of DOF
3. Greater enforcement on the registration of land dealings and transactions
4. Compilation of property market information and property stock from various
5. information sources such as Peoples Committees, DOC, Census,
6. Tax Dept etc

4) Expediting the Release of Agricultural Land for Urban Development Purposes

Releasing agricultural land for urban development purpose is slow and problematic. Major problems are the disagreement on the compensation offered, the reluctance of land authorities to convert the land use, the difficulties faced by individual agriculture LURC holders to convert their land to urban use, and the lack of detailed plans to guide the land allocation process.

A combination of new urban development methods, such as joint ventures for commercial development, land readjustment, guided land development, land taxation, introduction of development subsidies for the construction of city planning roads, and the use of urban growth boundaries, may be useful in addressing these problems.

Key Initiatives:

1. Implement the Urban Growth Boundary Strategy
2. Guided infrastructure development to key growth areas identified in the
3. Development plan e.g. Action Areas.
4. Procedures to facilitate the change of land-use purpose from agriculture to urban
5. uses for areas within the UDA subject to provision of adequate infrastructure

5) Establishment of a coordinated implementation program for Urban and Infrastructure Development Projects. (ULDP)

The statutory urban development plan should also establish a coordinated program for formulating and implementing infrastructure and urban development projects. The City Plan provides both the legal justification and community acceptance towards public expenditure in these projects as most city plans have to go through a public participation process. Infrastructure projects have to be planned in a coordinated and integrated manner and have to operate within the overall framework of the city plan. This is particularly important for transportation and drainage projects.

A comprehensive Urban and Infrastructure Development Program will include project proposals in Urban Development, Transport, Drainage and Sanitation and Urban Living Environment. It may be necessary to prioritize the projects into short term, medium term and long term initiatives. Some of these initiatives may also require changes in the institutional arrangements to facilitate their implementation.

6) Introduction of New Urban Development Project Methods

The current urban development methods employed in Hanoi for the larger FDI supported projects include:

- Joint venture with SOEs which own land.
- Getting the city to acquire/ recover land from existing LUR holders for the joint venture company set up to undertake the project.

Other methods which are applied for smaller projects and which are usually applied to local investors include:

- (i) Allocation of land-use right from the government
- (ii) Obtaining land on lease from the government
- (iii) Bidding (Tender) for land-use right
- (iv) Purchase (Transfer) of land-use right in the market
- (v) Land-use Rezoning (change of land-use purpose)

Of the above, the most profitable method to the developer is the land-use rezoning method. This would involve amending the city's urban plans as well as getting the land authorities to agree to the change. The other development method that would benefit the land owner is the outright sale (transfer) of the LUR in the market. However with the current high land prices, this option is not popular for housing development.

Most of the existing land development processes require government intervention in recovering the land or the participation of the SOE which own strategic land sites in the city. There should be a coordinated program to release SOE land into the urban market especially sites used as warehouses and industrial uses which are no longer appropriate in their present locations. For large scale housing development involving FDI, getting the city

to recover land for the joint venture company seems to be the preferred option. However, one of the main problems with this process is the long time it takes and the costs related to resettlement and compensation issues.

New urban development methods may be necessary to complement existing methods to accelerate the process of urban development. Urban development in most developed countries is carried out by the private sector and the city's involvement in area development is mainly limited to Action Area projects. A unique feature of the Japanese urban planning system is the active involvement of government agencies in the urban land development process. This includes projects such as Land readjustment, Urban Renewal Projects and New Residential Area Development. While the city takes the lead in several of these projects, there are opportunities for the private sector to be involved especially through land auctions and joint venture development.

Urban development project methods:

1. Urban renewal projects.
2. Land readjustment projects.
3. Action area projects (i.e. projects for areas that need improvements).
4. New residential area development.
5. Urban Regeneration Initiatives

(1) Urban Renewal / Redevelopment Projects

Urban redevelopment projects involve comprehensive redevelopment of dilapidated and non functional buildings into functional freestanding buildings of higher economic value. There are many such buildings in Hanoi but most of these are on State owned land belonging to the SOEs and scattered over the city. The challenge will be to facilitate such comprehensive redevelopment involving private land in an organized manner. From an urban development policy perspective this will require restrictions on individual shaplot redevelopment and incentives for comprehensive redevelopment. Some of the initiatives in this respect could include:

- (i) Limiting the height of individual shaplot redevelopment and encouraging amalgamation of shaplots through the provision of bonus plot ratio (FAR) incentives for comprehensive development according to the designated town centre zoning in the city plan. Comprehensive redevelopment however should not be encouraged in the historic and conservation areas.
- (ii) Identify suitable sites at transit stations and develop them comprehensively. This could include advance land purchase at selected transit station locations that could be developed and sold at a later stage as a cost recovery measure for constructing the transit infrastructure. It is important that transit planning and development should be done in an integrated manner with land development. Alternatively special incentives in terms of higher FAR may be given to LUR holders within 200m of the station to encourage redevelopment of the area.
- (iii) Releasing suitable SOE land to the urban land market for better productive use
- (iv) Providing government funded infrastructure services for selected urban redevelopment projects especially in the Action Areas
- (v) Strengthening capacities of the city and selected urban development corporations to undertake urban redevelopment projects including powers to acquire/ recover land.
- (vi) Establishing a law on urban redevelopment to facilitate urban redevelopment in a comprehensive manner

(2) Land Readjustment Projects

Land readjustment projects are one of the more effective ways of providing housing allotments for the city without the need for land acquisition/ recovery. The direct beneficiaries of this process will be the existing LUR holders as opposed to the Land acquisition (land recovery) method where the existing owners are displaced and receive only meager compensation. This method has been applied extensively in Japan and Germany and currently being tested as an alternative urban development method in many ASEAN countries.

Basically the process involves land contribution for public facility land and financial land from the existing LUR holders and the replotting of housing lots according to an agreed layout plan. The financial land is sold in the open market to raise funds for the project. This method is best applied in the urban fringe /suburban areas where the land parcels are larger and the area is less built up and where there are opportunities for escalation of land values. The LR project can be implemented by the Housing Corporations, the City Government, Land Owners Cooperatives and private developers. Again the successful application of this technique may also require a law on LR. A feasibility study on its application should be carried in Hanoi to test its viability especially in the urban fringe areas.

(3) Action Area Projects

Land readjustment projects are one of the more effective ways of providing housing allotments for the city without the need for land acquisition/ recovery. The direct beneficiaries of this process will be the existing LUR holders as opposed to the Land acquisition (land recovery) method where the existing owners are displaced and receive only meager compensation. This method has been applied extensively in Japan and Germany and currently being tested as an alternative urban development method in many Action Areas are specific areas in the city that should be treated in comprehensive manner by way of development, redevelopment, improvement, conservation or other appropriate management practice.

Basically Action Areas are designated for areas where there is an urgency and strong public interest for the city to develop the area as soon as possible. This generally includes projects related to slum clearance and environmental improvement. As these are basically city planning projects, the city is required to first identify the Action Area in the city plan after which it has to prepare an Action Area Plan for public participation and objection. After the plan is approved, the Action Area is gazetted and the city will commence to develop the area according to the plan. Again to be successfully implemented there has to be a legal provision for Action Areas in the planning law of the country.

(4) Large Residential Area Development

These are basically large township development especially in the fringe and suburban areas of the city. There are already several large township projects in Hanoi. Some of the larger projects include the Ciputra in North Thang Long (353ha), Dong Ngac New Town (242ha), Trung Hoa- Nhan Chinh New Urban Area (32.86ha) etc. It is important that large tracts of land that are not yet subdivided in the suburban locations within the Urban Growth Boundary are earmarked for new residential area development. However it is noted that there are very few large land holdings in the city. Most of the larger sites are under the SOE or communally owned. Large tracts of residential land could be sold / auctioned to potential

investors to develop new residential areas in a comprehensive manner. Due to economies of scale the developer will be able to provide all the necessary infrastructure and public facilities for the project. Provisions of low income housing could also be imposed on such developments through the planning permission system.

(5) Urban Regeneration Initiatives

These generally involve projects related to improvements to the living environment of existing communities. These include projects such as landscape enhancement, improvements to transport management and parking, provision of pedestrian malls, improvements to local heritage and tourism facilities, revitalizing the city through professional marketing and events programs, creating clean and safe environments and other community related projects. Some of these initiatives are promoted by UN Agencies such as Local Agenda 21 programs while others are initiated by the Community Based Organizations. There are several such organizations in the UK such as the Association of Town Centre Management (ATCM), English Partnerships, and BURA (British Urban Regeneration Associations).

Many of these programs involve a strong government- private sector partnership involving the city, local business groups, professional associations and the local community. The programs are also multi faceted in developing comprehensive community participatory programs addressing a wide range of issues that affect the community and not merely limited to physical infrastructure provision. Such a program could be initiated in the Old Quarters in Hanoi involving several stakeholders including the Ancient Quarters Management Board, the local business community, the local residents and professional bodies (see pilot project study). Funds for these projects are usually derived from contributions of both the city and the private sector.

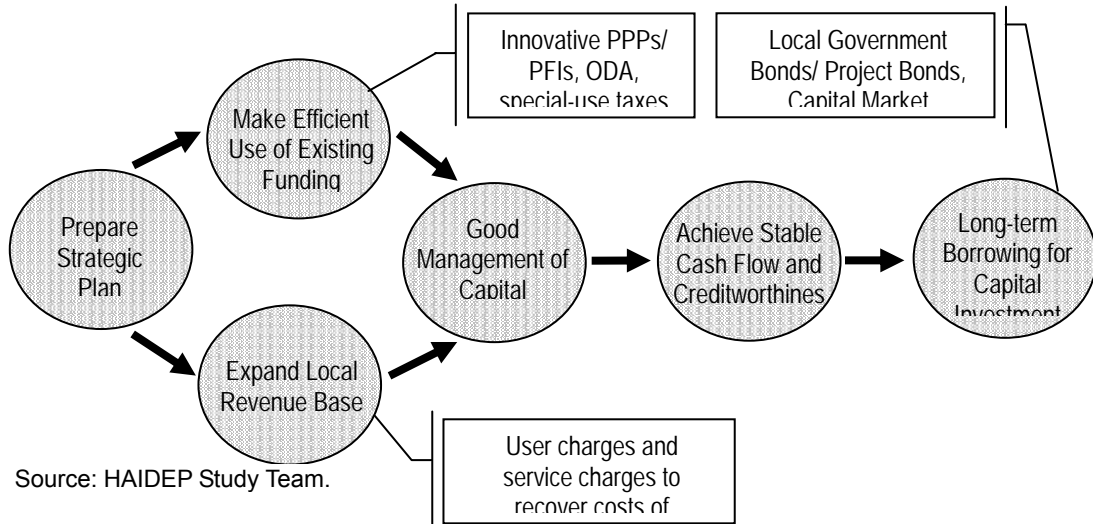
Key Initiatives:

1. Technical assistance in carrying out a feasibility study on the introduction of new urban development project methods including urban renewal and land readjustment.
2. Initiate a pilot project on urban regeneration in the Ancient Quarters
3. Establish a training program on the urban development methods in NIURP and HICP.
4. Examine the need to introduce laws / regulations on new urban development methods involving land readjustment and urban renewal

15.4 Urban Sector Funding

The existing revenue base of the city is not sufficient to fund future infrastructure projects. As part of the financial strategy, the city may have to expand the local revenue base, make efficient use of existing funding sources and exercise good management of capital financing. This is depicted in the diagram below.

Figure 15.4.1 Strategic Mobilization of Funding



1) Efficient Use of Funding

The main funding sources for the city are derived mainly from state balancing allocations from the central government, local revenue, SOE investment capital, household investments, and external sources such as FDIs and ODA. There has to be greater efficiency in the use of these funds especially through the development of management information systems and strategic financial planning. The existing decentralization policy provides for increased fiscal autonomy to the city administration, but this should also be accompanied by better and transparent regulatory mechanisms to protect the interest of both producers and consumers. Some of the key initiatives in this area are the following:

- (a) **Accessing Household Funding for the Housing Sector by Expanding the Mortgage Market:** As it stands now, it is difficult for ordinary people to borrow for house purchases. While land and property could be effectively used as collateral in sourcing both bridging and end financing in the housing market, certain weaknesses in the existing laws have to be addressed first to further develop the mortgage market. The weaknesses lie in providing legal protection for properties and in conferring rights to the bank on foreclosure proceedings in the event of default by the borrower.
- (b) **Contracting out Services:** The existing practice of contracting out urban services especially for infrastructure maintenance should continue and be expanded to new areas. This will provide greater opportunities for the private sector to participate and would generally lead to more efficient service delivery if managed well.
- (c) **Applying User Charges and Service Fees:** Direct cost recovery through user charges is usually more effective than indirect cost through property taxes. User charges are generally applied for electricity and water and as tolls for bridges and highways. More recently, they are also used for area road pricing to discourage private transportation into the city center during peak hours and to encourage the use of public

transportation instead. While user charges should help recover maintenance costs, the capital costs for roads, drainage, and sewerage cannot be directly recovered from them. Some form of property tax may be needed to recover the capital cost.

Key initiatives:

1. Expedite the issuance of property documents such as LUR, Housing Certificates and other property rights documents to all property owners in Hanoi.
2. Technical Assistance on Urban Housing Finance with a view to expanding the mortgage market
3. Applying user charges and service fees to recover operational and maintenance cost of providing urban services

2) Expansion of Local Revenue Base

While it may be difficult for local authorities to rely totally on locally generated funds to finance large urban development and infrastructure projects, it is important for city governments to expand the local revenue base within the provisions of the law. Some of the initiatives that could be expanded further in Hanoi could include the following:

- (a) **Property Assessment Taxes:** In addition to land taxes, many cities also impose property assessment taxes. These taxes constitute a major portion of the revenue of cities. For example in Kuala Lumpur, it constitutes 62% of the operating revenue of the city. Property assessments are based on the annual rental value of a property. Differential assessment rates are determined based on the type of property, e.g. residential, industrial, commercial, vacant land, utility or government land. Assessments are collected twice a year by the city from all property owners in the city. Key to establishing such a system in Hanoi will depend on how well legal ownership of property is established (this is still being debated in the Assembly), as well as on establishing a comprehensive valuation list of all properties in the city.
- (b) **Betterment Charges:** Betterment charges are imposed to compensate for the improved value that is accrued to the property owners as a result of constructing a public facility, such as access roads and drainage facility, in the area. The landowners who benefit from the facility will be required to pay a betterment charge to the city. However, for this to be effective an equitable formula for determining betterment charges has to be derived that would be acceptable to the affected community. For example, landowners who gain access to a newly constructed road could be assessed proportionately to also pay a part of the compensation cost for the removed houses. Similarly, landowners who lose a portion of their land to road construction projects should be compensated only after taking into account the improved land value of the remaining portion of their land. The introduction of land development techniques, such as land readjustment, where betterment values are equitably incorporated in the land replotting exercise is an effective method of practically applying these charges.
- (c) **Development Charges:** Development charges are applied as an urban planning tax that is imposed on the developer at the time of applying for planning permission. Development charges constitute about 6% of the operating revenue of Kuala Lumpur. The development charge includes payment for the improved value of land as a result of rezoning or increased densities given to the landowner as a result of revisions / amendments to the statutory plan. Development charges are also collected by the city as in lieu payments for the non provision of facilities, such as car parking areas and school sites, as required under the planning standards. The developer is also required

to contribute to the Infrastructure Service Fund in lieu of constructing the necessary public facilities, such as roads, drainage, landscape, and sewerage, especially if such facilities are constructed by the government. The funds are used by the city to provide the necessary facilities in a coordinated manner.

Key Initiatives:

1. Feasibility study on the introduction of property assessment taxes.
2. Feasibility study on the introduction of betterment charges, development charges and establishment of an Infrastructure Service Fund for the city.
3. Amend and provide laws for the introduction of these charges/ taxes

3) Good Management of Capital Financing

Good management of capital financing is important to reduce the prolonged financial burden of repaying long-term debts. While ODA lending is usually at subsidized rates, it does create long-term debts for the city. Refinancing ODA funds at higher commercial rates in the form of state investment credit is a popular source of funding for social investment projects in Hanoi.

(1) Access to Capital Markets and Other Credit Finance

It is also important to ensure funding for urban development projects. The use of stocks and shares as collateral for loans is not common and could be developed further with the strengthening of the stock market and the passage of a Securities Law. The other strategy is to introduce government-guaranteed bonds. Currently, many of the larger cities, including Hanoi, have issued municipal bonds to raise capital. Bonds with a 5-year maturity at 8.5% interest have been issued by the city to finance the Vinh Tuy Bridge project. It is important that in issuing bonds, the capacity of the city to repay promptly is important to ensure the long-term viability of raising finance through this means. Good management of capital finance is also related to the various types of project implementation methods that could be utilized to reduce the financial burden on the city.

(2) Effective Project Implementation Methods

Include measures, such as BOT (Build Operate and Transfer) and BT (Build and Transfer), and Deferred payment schemes which have been widely applied on highway and water supply projects in Malaysia and in other developing countries. The city should also continue with further initiatives in outsourcing urban services. This has been applied to garbage collection and could be further extended to public and bus transportation operation, public infrastructure maintenance, operation of parking facilities, wastewater treatment and other public facilities. This would suggest that some of the service functions of existing SOEs should be tendered out to private operators.

(3) Capacity Enhancement of Property Developers

There should also be more players in the property development sector. Currently, most of the housing development projects are monopolized by SOEs, giving little opportunities for private housing developers to enter the market. As of 1999, it is reported (JBIC Study) that private developers only accounted for as little as 3% of the total housing output in Hanoi. Some of the main SOEs involved in property development are the Housing and Urban Development Corporation (HUD), Hanoi Housing Investment and Development Corporation (Hadinco), and several other landholding SOEs. Most of these agencies are involved in small housing projects mainly catering for the higher income group and do not

have the capacity to meet the housing needs of the city in the long term particularly the demand from the lower to medium income households. (A total of 381000 additional housing units is needed till 2020).

There should be some rationalization on the part of government institutions involved in property development. One strategy is to rationalize existing housing development SOEs into two organizations as illustrated by the Singapore model wherein the Housing Development Board (HDB) was set up to provide public housing, while the Urban Redevelopment Authority (URA) was established to undertake commercial development through urban redevelopment. The responsibility for providing higher cost housing should be left to the private developers. Notwithstanding this, improvements to the housing sector has to be looked at holistically including the regulatory aspects pertaining to real estate developers law and real estate registration law (including provisions for strata property development and management); real property gains tax; easy access to finance and housing credit both for the developer and the purchaser, greater release of serviced agriculture land for urban development purposes, transparent and shorter project and planning approval process, more open land auction and bidding process, and more qualified contractors and consultants).

Key Initiatives:

1. Feasibility study on the establishment of a Housing Development Authority for public housing and an Urban Redevelopment Authority (URA) for urban redevelopment. The study should also review the existing capacities of housing development corporations and propose strategies for consolidation or merger of these organizations
2. Use of effective public private partnership implementation models
3. Policies to promote private real estate developers including the establishment of a real estate developers law.

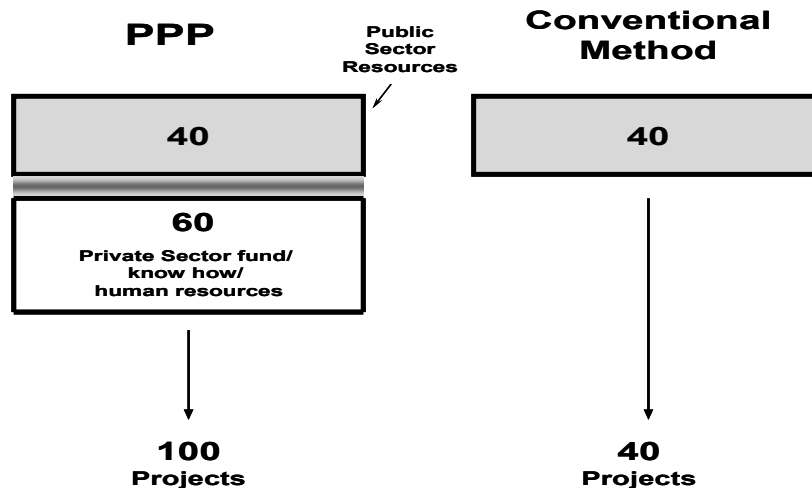
4) Application of Public and Private Partnership (PPP) Concept in City Development

As economy and private sector grow further, application of PPP concept is becoming critical for effective management of urban development and sector administration. Main aspects of the PPP are as explained below.

(1) Maximizing the Effect of Public Sector Resource Allocation

Resources in public sector such as fund and man power are very limited. A key concept of Public and Private Partnership is to maximize the effect of the public sector resource allocation when implementing public sector projects. Under the PPP arrangement, the effect may expand to a considerable extent with the power of private sector resources (fund, know how and human resources) allocated to the project. In other words the public sector may be able to “leverage” the effect of the input of 40 to become the out put of 100 by introducing the PPP concept as illustrated in Figure 15.4.2.

Figure 15.4.2 Maximizing the Effect of Public Sector Resource Allocation

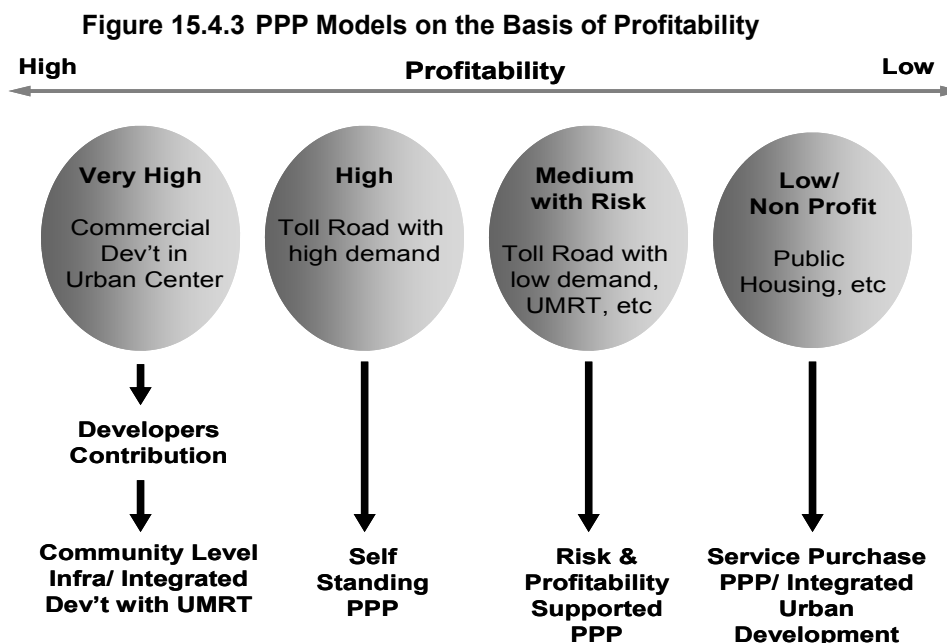


Source: HAIDEP Study Team.

(2) Adopting Different PPP Models on the Basis of Profitability

Profitability of the project will decide what type of PPP model to be applied (see Figure 15.4.3). The projects that HAIDEP proposes have a wide range of profitability from very profitable to non profit producing (no user charges).

- (a) **Very high profitability:** If the project is highly profitable such as commercial development in urban center, HPC could arrange a PPP on the basis of HPC's land provision to ask for developer's contribution of community level infrastructure. This PPP concept may also be applied to the integrated urban development with the UMRT systems.
- (b) **High profitability:** When profitability is high enough for the project to be financially self sustainable, self standing PPP model may be applied. Example of this may be a toll road project with high traffic demand. Project of this type could go on the conventional BOT bidding procedure.
- (c) **Medium profitability with risk:** The third type model, risk and profitability supported PPP will be applied to those projects that have a limited degree of profitability. Majority of revenue producing projects in HAIDEP will fall into this category and require a careful PPP structuring. Toll road with low traffic demand, UMRT systems, AQ urban redevelopment, water bulk supply and so on are the example of this type. HPC will have to involve in PPP structuring in terms of necessary risk and profitability support.
- (d) **Low profitability or nonprofit:** Service purchase PPP model may have to be applied to those projects with very low profitability where HPC will "purchase" the service that the private sector produces by allocating HPC's own funding resources. Examples are the public housing, urban park development, etc. This model can be applied even to the non revenue producing projects such as community facilities.

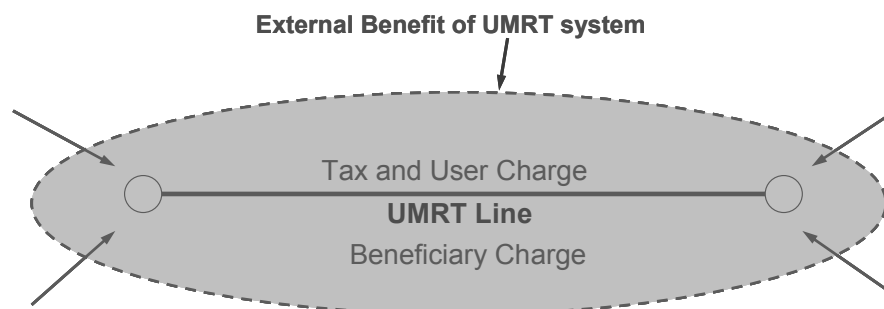


Source: HAIDEP Study Team.

(3) Value Capturing of External Benefit of UMRT Systems

External benefit which a UMRT system brings about to the City is very large and its huge investment can only be recouped when the City is able to successfully capture the value that the UMRT system creates along its corridor (see Figure 15.4.4). Tax revenue and user charge are used to fund its construction and operation, but it is also essential to capture the value which people and business benefit from the operation of the UMRT system (“beneficiary charge”). In order to do the above, HPC should take an initiative in applying various PPP models in implementing integrated commercial, office and residential projects that are i) directly integrated with the stations/terminals, ii) developed in the vicinity of the station/terminals and iii) developed along the corridors of the UMRT systems. Thus, HPC will be able to share a part of benefit that those PPP arrangements produce in the future to recoup its huge initial investment in the long run.

Figure 15.4.4 Value Capturing of UMRT’s External Benefit



Source: HAIDEP Study Team.

(4) PPP Opportunities in the HAIDEP Projects

There are a variety of PPP opportunities in implementing the HAIDEP proposed projects (see Table 15.4.1). They are briefly as follows:

(a) **Urban Transportation Subsector:** There are many opportunities such as some of the

primary roads to be tolled and the projects in Traffic Management and Safety. The BRT project may well be on the concession and some of the UMRT lines may be implemented under PPP scheme although HPC may have to shoulder the cost of infrastructure. Some of the secondary and tertiary roads may be developed through the urban development projects initiated by the private sector developers.

- (b) **Regional Transportation Subsector:** Some of the inter-city highways may be implemented under a PPP scheme and even some of the regional railway links may be considered subject to close coordination with VR. The new air port terminal of the Noi Bai Airport could be developed under the PPP concession. Some of the IWT ports could also be structured under PPP schemes.
- (c) **Living Conditions Subsector:** The opportunities are rather limited, and considerable funding allocation by HPC may be needed to make a PPP scheme possible. Some of the housing and parks and green spaces may be procured through commercial and residential development done by private developer under PPP arrangement possibly with the contribution of public land.
- (d) **Urban Water and Sanitation Subsector:** PPP opportunities may rather limited to the water supply projects. However, some of the components even in the drainage, sewerage, flood control and lake management could be structured under PPP scheme if the service purchase PPP model is applied.
- (e) **Urban Development Subsector:** This is a very promising sub sector where various PPP schemes may be applied to the projects. HPC may be able to make use of the high profitability of those projects and ask the developers for their contribution of developing community level facilities such as tertiary roads, drainage and sewerage and other community related facilities. A large PPP opportunities exist in the commercial, office and residential developments directly integrated with the terminals/stations of the UMRT systems and in the integrated urban developments to be proposed in the vicinity of those UMRT stations and terminals.

Table 15.4.1 PPP Opportunities in HAIDEP Projects

Subsector		PPP Opportunities			Remark
		Construction	Maintenance	Operation	
Urban Transportation	Primary Road	yes but limited	yes	yes	With high traffic demand
	Secondary Road	yes but limited	yes but limited	NA	Through urban dev't
	Tertiary Road	yes but limited	yes but limited	NA	Through urban dev't
	Traffic Mgmt.&Safety	yes	yes	yes	Large support needed
	Bus Transportation	yes	yes	yes	Concession PPP
	UMRT	yes but limited	yes	yes	Infrastructure developed by public sector
Regional Transportation	Roads	yes but limited	yes	yes	Inter-city expressway
	Rail	yes but limited	yes	yes	Coordination with VR
	Airport	yes	yes	yes	Terminal operation
	IWT Ports	Yes but limited	yes	yes	Some port operation
Urban Water and Sanitation	Water Supply	yes but limited	yes	yes	Coordination with HWBC
	Drainage	Yes but limited	yes but limited	yes but limited	Service Purchase Model(SPM)
	Sewerage	Yes but limited	yes but limited	yes but limited	SPM
	Flood Control	Yes but limited	yes but limited	yes but limited	SPM
	Lake Improvement	Yes but limited	yes but limited	yes but limited	SPM
Living Conditions	Housing Rental	yes but limited	yes but limited	yes but limited	Through commercial & residentl dev't
	KTT Improvement	yes but limited	yes but limited	yes but limited	Through commercial & residentl dev't
	Park and Green Space	yes but limited	yes but limited	yes but limited	Through commercial & tourism dev't
	Landscape	yes but limited	yes but limited	yes but limited	Through commercial & tourism dev't
Urban Development	Greenery Improvement and Cultural Promotion	yes but limited	yes but limited	yes but limited	Through commercial & tourism dev't
	Redevelopment and Improvement of Existing Urban Areas	yes	yes	yes	Through urban development/ UMRT integrated dev't
	New Development in New Urban Areas	yes	yes	yes	Contribution of public land/ UMRT integrated dev't
	Rural Area Improvement	yes but limited	yes but limited	yes but limited	Through commercial & tourism dev't
	Industrial & Logistics Improvement	yes	yes	yes	

Source: HAIDEP Study Team.

15.5 Improvements to the Urban Planning Institutions

1) Plan Preparation, Implementation, Monitoring, and Review

The proposed institutional responsibilities for the plan preparation, implementation, monitoring and review are shown in Table 15.5.1. Generally the lower level plans have to conform to the higher order plans. As per the provisions of the Construction Law 2003, the General Plan for the city of Hanoi is prepared by the Hanoi Peoples Committee (HPC) through the offices of HAUPA. It is approved by the Prime Minister and will be administered by HAUPA. As a statutory plan of the city there is a duty on all Ministries and Departments to implement and conform to the policies and proposals of the Plan. Once the plan is approved, its implementation should be monitored. Some of the key aspects that need to be monitored are the development targets and urban indicators of the General Plan, land-use change, approval of development projects in the districts. The monitoring should be done on an annual basis by HAUPA which will compile the necessary information from the districts. One of the key instruments to assist in the monitoring is to develop a GIS Planning Information system that could be linked between the City and the District. The General Plan should also be reviewed every 5 years in tandem with the Socio- Economic Development Plan (SEDP).

District Plans should be prepared for all the districts by the respective District Peoples Committee. The district plan will translate the proposals of the General Plan in greater detail and will contain specific proposals for Development Control. The plan should be done using a Survey/ Cadastral Base Maps. Again these plans should be monitored regularly and reviewed every 5 years.

Action Plans are only prepared for specific areas to provide a regulatory framework for the implementation and management of development projects. The Action Plans may be identified in both the City General Plan or in the District Plan. The various types of statutory city plans are discussed earlier.

Table 15.5.1 Proposed Institutional Responsibilities for Urban Plan Preparation and Review

Statutory Urban Plans	Prepared	Appraised by	Approved	Implemented	Monitoring	Review (every 5years)
General Plan for Hanoi	HPC	MOC	Prime Minister/ Govt	HPC and other responsible Ministry, Depts. and agencies at the city level	HPC/ HAUPA	HPC/
District Plan (Detail Plan Type 1)	DPC ¹⁾	HAUPA	HPC	DPC and responsible Ministry, Departments and agencies at the city and district level	DPC	DPC
Action Plans (Detail Plan Type 2)	HPC/ DPC ²⁾	HAUPA	HPC	Responsible Peoples Committees, Ministry, Departments and agencies at the city and district level	HPC/ DPC	HPC/ DPC (review only if necessary)

1) According to Circular 15/2005/TT-BXD of MOC: Detail Plans of 1:2000 scale is to be formulated by the Provincial People's Committees for subcenters of Special Grade, Grade 1, 2 and 3 towns, whereas DPC will formulate Detail plans of 1:2000 for subcenters of towns of grade 4 and 5 as well as detail plans of 1:500.

2) Depending on whether the Action Plan is proposed in the General Plan or in the District Plan.

Key Initiatives:

1. Designation of responsibilities on plan preparation, monitoring and review between the city and district
2. Monitoring of targets and indicators of the General Plan and District Plan
3. Feasibility study on the Introduction of GIS Planning Information System
4. Preparation of District Plans for all the districts in Hanoi
5. Adequate Budget allocation for the preparation and monitoring of the plans

2) Enhancement of Planning Capacities of District People's Committees

The general intent of construction planning under the Construction Law 2004 is to decentralize planning functions to the lower planning authorities. Under the current MOC circular 15/2005 /TT-BXD, the Detail Plans 1:2000 for the urban centers of Grade 1, 2 ,3 should be prepared by the Provincial People's Committees whereas the Detail Plans 1: 2000 of town centers of Grade 4 and 5 are the responsibility of the DPC. The MOC circular was further affirmed by HPC decision 48/2006/QD-UB whereby the preparation and approval of detail plans of 1/500 scale of less than 20ha is the responsibility of DPC.

HAUPA is generally responsible for appraising all urban plans that require the approval of HPC. HAUPA is also responsible for providing training and guidance to DPC in urban planning work and also acts in an inspectorate capacity in making sure that the lower tier plans are in line with the General Plans. The HPC decision 48/2006/ QD-UB also calls for the setting up of a new Urban Construction Division at the District PC level which will be responsible for construction planning. This division as per the decision should contain at least one urban planning architect, urban transport engineer, and a public works engineer.

Based on this overall framework it is proposed in this study that District Plans (Type1 Detail Plans) be prepared by the District Peoples Committee (DPC). Although most DPC do not have the capacity in terms of financial resources nor skills to carry out this function, it may be necessary to develop these capacities in the long run. Some of the advantages of this proposal are:

- (i) It is in line with the decentralization policy of the government
- (ii) It complements district land-use planning functions which is the DPC's responsibility.
- (iii) It provides opportunities for town planners to be involved in district planning work.
- (iv) It provides greater opportunities for implementing, monitoring and enforcement of planning decisions.

Regular budgets have to be allocated in the 5 year SEDP for the DPC to prepare the District Plans and keep them in review. Under this proposal, the Urban Construction Division will be established in all the existing Urban Districts and headed by a qualified town planner (see Figure 15.5.1). For the existing suburban districts of Gia Lam, Tu Liem, Soc Son, Thanh Tri and Dong Anh, it is proposed that in the interim period these areas continue to be administered by HAUPA as a technical planning adviser to the DPC .These districts will be subject to major urban developments in the near future and adequate planning capacity and city wide coordination is needed to manage these developments.

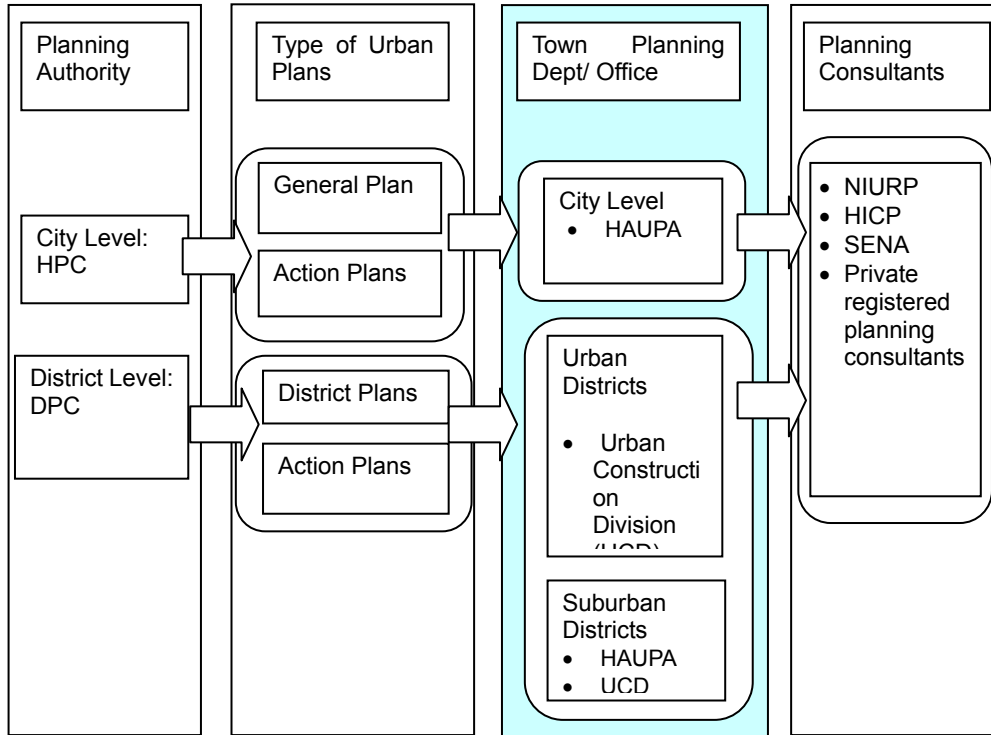
Some of the functions of the urban planner at the district level are:

- (i) Compile and update planning information at the district level
- (ii) Monitoring of urban development to see that it conforms to the decisions of planning authorities

- (iii) Preparatory work and management of district plans and action plans
- (iv) Appraisal of planning applications for issuance of planning permits by the competent authority.

There is also a need to develop town planning consultancy skills in the country. Preparation of urban plans may be outsourced to existing SOE companies such as HICP, SENA or to registered private planning consultants.

Figure 15.5.1 Decentralized Town Planning Offices



3) Unified Statutory Plans in Urban Areas

There should be clear distinction between the land-use plans under the Land Law and the Construction Plans under the Construction Law. The focus of construction planning should include urban and regional development planning, while land-use planning under the Land Law should relate to natural resources planning and protection of agricultural land. As such, the operative physical plans within urban areas should be the urban construction plans, while the operative physical plans outside the urban areas could be the land-use plans. Notwithstanding this there should be close coordination between DONRE and HAUPA in the preparation of the City General Plan. Key information on existing land use, land-use planning schedules and policies on land use should be provided by DONRE to assist in the preparation of a coordinated Urban Plan for Hanoi. The proposed demarcation of jurisdiction is shown in Table 15.5.2.

Once the city plan is approved by the Prime Minister it will serve as the unified statutory physical plan for construction activities as well as land-use management for the city area. Other strategic inputs into the Urban Construction Plan will be from the SEDP which will provide the socio economic framework for the area and the sector plans of the various departments and Ministries (Figure 15.5.2) which will establish departmental projects and programs. There should also be a clear hierarchy of urban planning authorities in the planning law of the country. This should include appropriate organizations at the National, Regional and Local level.

Table 15.5.2 Proposed Area of Jurisdiction of Urban Construction Plans and Land-use Plans

Jurisdiction	Within Urban Areas ¹⁾	Outside Urban Areas
Determinant Statutory Physical Plan	Urban Construction Plans (General / Detail Plans)	Provincial / District Landuse Plans
Enabling Law	Construction Law	Land Law
Legal responsibility for preparing the plan	City/ District Peoples Committee	City/ District Peoples Committee
Agency responsible for preparing the plan in Hanoi	City Planning Department (HAUPA) in association with DONRE	DONRE in association with technical departments
Approved by	As prescribed under Construction Law/ Decrees	As prescribed under Land Law / Decrees

1) Urban Areas are defined by Government as per Decree 72/2001. Hanoi is designated as a special grade city and the general urban construction plan should apply for the whole city area.

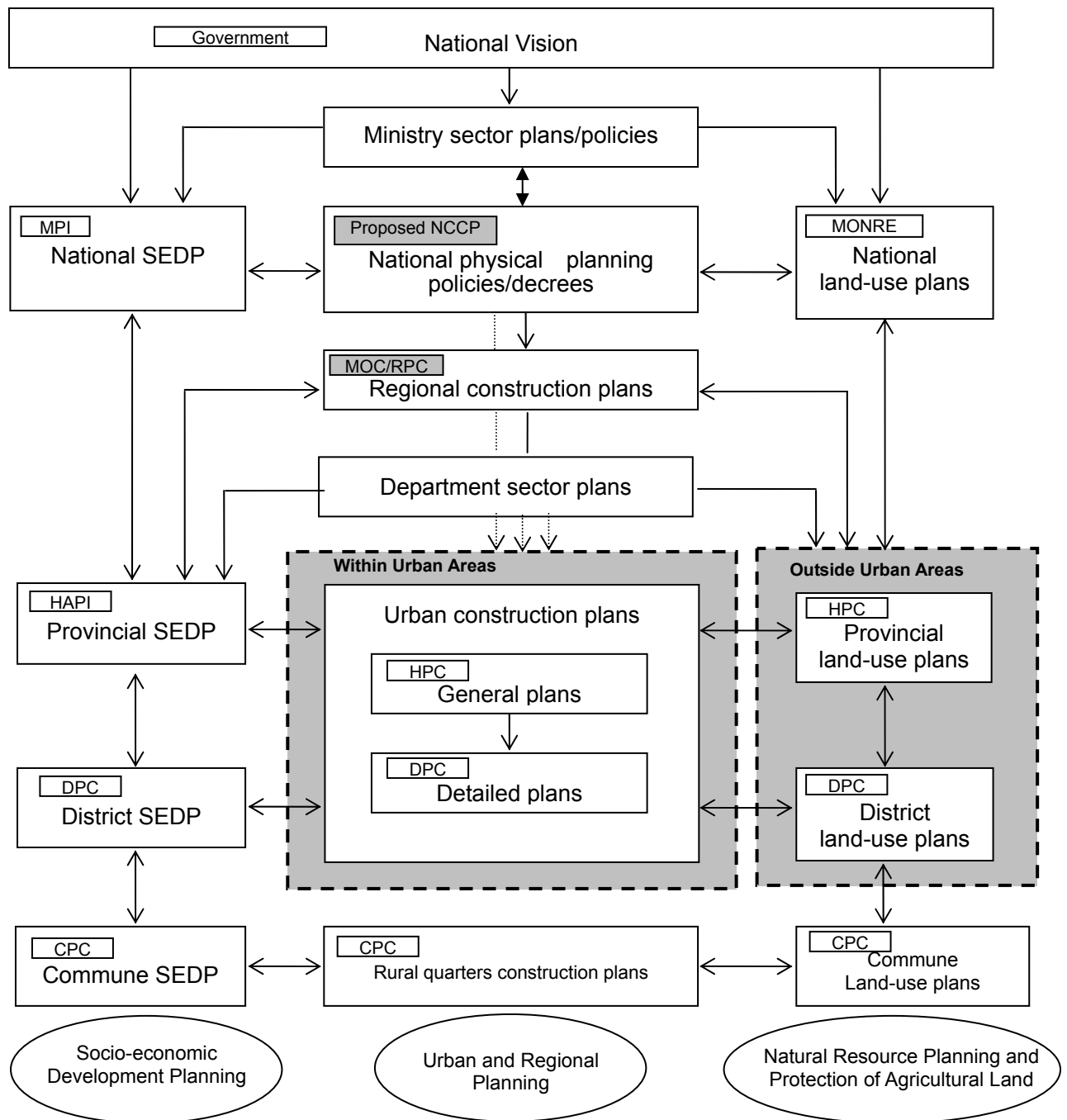
4) Establishment of a National Council for Construction Planning

As construction planning is an integrated activity, it involves the interests of many other ministries, such as MOT, MONRE, MPI, etc., that have to be integrated and coordinated. There may be a need to establish a permanent Council of Ministers for Construction Planning (NCCP). All directives and guidelines on urban and regional planning could be deliberated in this Council before they are issued by the government. Important strategic projects (e.g. Group A projects) could also be reviewed by the Council before an investment license is issued. The Council should be chaired by the Prime Minister, while the Secretariat should be the Department of Architecture and Planning (DAP), Ministry of Construction, which would execute the Council's decision. This Council could be modeled after the National Physical Planning Council (NPPC) of Malaysia or similar organizations in other countries.

Some of the functions of the Council are the following:

- (i) Formulate uniform policies/decrees on urban and regional planning/ construction planning for the country including the Review of the Orientation Master Plan for Urban Development 2020.
- (ii) Issue planning directives to lower planning authorities such as people's committees of provinces and centrally managed cities;
- (iii) Establish guidelines on the formation of regional plans and Regional Planning Committees;
- (iv) Advise on strategic urban development projects (to be defined) before approval of investment license;
- (v) Promote research, publish reports, and provide information and education to the public regarding urban and regional planning; and
- (vi) Formulate regulations/ guidelines with respect to urban and regional development planning

Figure 15.5.2 Proposed Framework for Development Planning



1. Urban area as identified by the government.
2. NCCP: National Council for Construction Planning (Proposed).
3. HPC: Hanoi People's Committee.
4. DPC: District People's Committee.
5. CPC: Commune People's Committee.
6. RPC: Regional Planning Committee.

Key Initiatives:

1. Further discussions on the proposal to be initiated with Dept of Architecture and Planning (DAP) of MOC.
2. Comparative studies on National Physical Planning Systems in other countries e.g. Denmark, Netherlands, Malaysia etc.
3. Technical Assistance in the formation of suitable national and regional planning organizations
4. Provision of adequate budget for national physical planning
5. Amendment to the Construction Law

5) Establishment of a Regional Planning Committee for the Hanoi Metropolitan Regional Plan

Under the Construction Law the regional plans are prepared by MOC and approved by the Prime Minister. Notwithstanding this, a suitable form of regional organization to support MOC is necessary to ensure continuity and help resolve competing demands, and coordination of development projects. It will be increasingly difficult to implement a regional plan without the support of the provincial governments and the various other ministries in the Central Government. There are various forms of Regional Planning Organizations. Some are established as Committees, Councils of elected representatives or Regional Planning and Development Authorities with powers to finance and implement projects. The proposed Regional level organization should have strong linkages to economic planning and financial planning institutions (MPI and MOF) and also have statutory powers to execute its functions. One possible option is to establish a regional planning committee (RPC) to ensure continuity and review of the Hanoi metropolitan plan. The RPC chairman could be appointed by the Prime Minister, while its members could include relevant ministries and representatives of the provincial people's committees within the Region. The RPC should also have strong administrative linkages with the proposed NCCP as both national and regional policies and proposals on infrastructure and urban development are important to the central government. In carrying out its functions, the RPC should be assisted by MOC's DAP which will provide both the technical and secretariat support.

Some of the functions of the RPC could be as follows:

- (i) Promote a comprehensive regional development plan for the region in association with MOC.
- (ii) Advise the provincial people's committees within the region on national and regional policies that apply to the region.
- (iii) Plan and coordinate the provision of infrastructure and facilities in the region.
- (iv) Monitor the implementation of the regional plan and projects and keep the plan in review.
- (v) Assess urban construction general plans in the region to see that they conform to the regional plan for the area.
- (vi) Conduct research and prepare reports and publications relating to construction planning / urban and regional planning within the region.
- (vii) Report to the NCCP and furnish it with necessary information relating to its (RPC) activities in the region.

Key Initiatives:

1. Further discussions on the proposal to be initiated with the Dept of Architecture and Planning (DAP) of MOC.
2. Comparative studies on Regional Planning Organizations in other countries e.g. France, Australia, Germany, etc.
3. Amendment to the Construction Law
4. Provision of adequate budget for the preparation of regional plans

6) Enhancement of the Planning Coordination Function of HPC

There are four types of plans that are prepared as part of the development planning system in Hanoi, i.e. the SEDP, the urban construction plans, land-use plans and the Sector plans. All these plans are prepared by different agencies that are answerable to HPC and their respective line ministries. In order to prevent contradictory proposals and ensure harmonization of these plans in terms of project priorities and implementation coordination, there may be a need to enhance the planning coordination function of HPC.

The HPC should operate like a city council and be accountable for these plans. There is a need for both technical coordination of the physical plans as well as budget coordination of the projects to be implemented. In this respect, it is proposed that this responsibility should be carried out by HAPI on behalf of HPC. HAPI is in a suitable position as it is responsible for the coordination of budget allocation and establishing sector and project priorities. Additionally, HAPI has staff strength of about 100 which include economists and engineers. In order to facilitate this function a new office of plan coordination and monitoring could be established.

Key Initiatives:

1. Initiate further discussions between HAPI, HAUPA and DONRE on coordination issues relating to the Development Plans for the city
2. Technical Assistance on institutional arrangements for urban development planning and management with a view of promoting capacities in HAPI, DONRE and HAUPA.
3. Prepare a manpower plan for the office (staffing, skills, equipment, budget)
4. Allocate sufficient budget

The main functions of this office are as follows:

- (i) Ensure consistency in plan proposals in all the development plans, i.e. SEDP, Urban Construction general plan, Land Use Plans (LUP) and Sector plans;
- (ii) Ensure sufficient financial allocation for the preparation of these plans and their subsequent review;
- (iii) Establish Sector and project priorities and ensure a coordinated implementation of the development proposals of various plans
- (iv) Monitor the implementation of the plans.

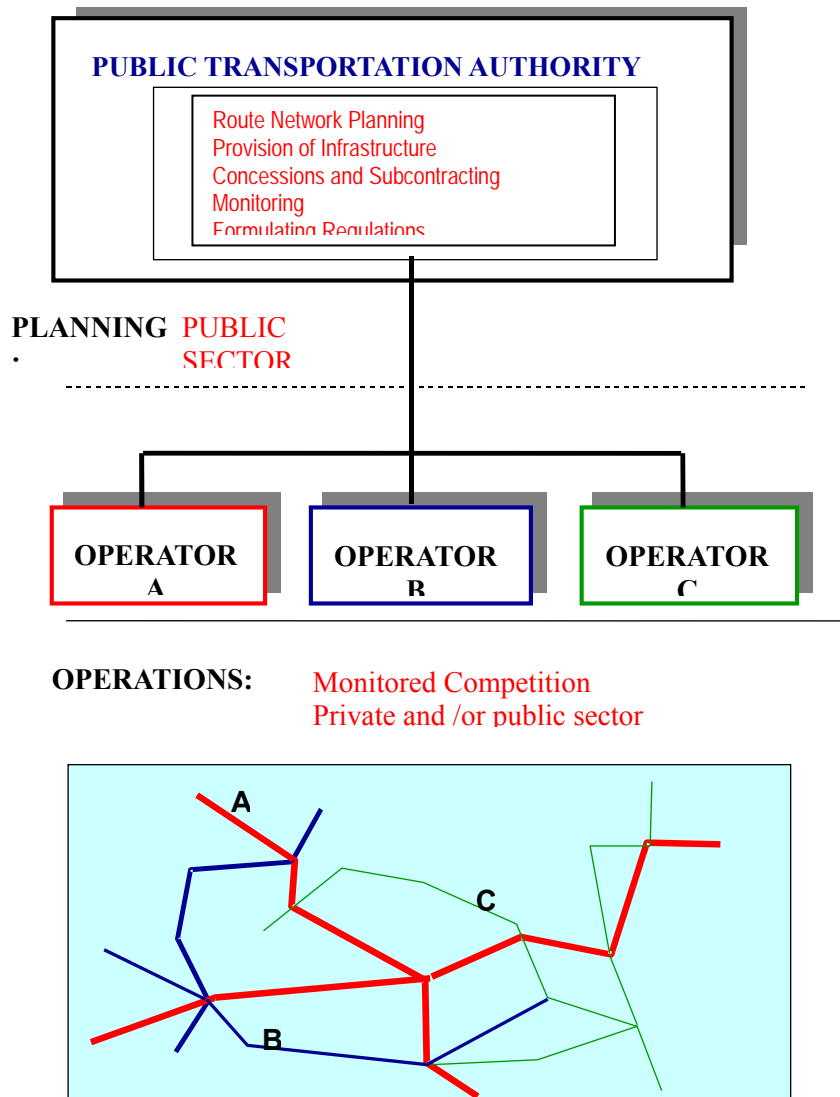
HAPI should also ensure that priority is given to the proposals in the construction plan and that adequate financial resources are allocated to ensure its implementation is done in a coordinated manner.

7) Establishment of the Hanoi Public Transportation Authority

In order to facilitate an integrated and coordinated public transportation network and ensure competition among the operators, there is a need to establish a public transportation authority (PTA) in Hanoi. The PTA is responsible for managing available

resources in order to provide the best possible public transportation system. Its functions can vary, but the key ones are depicted in Figure 15.5.3.

Figure 15.5.3 Hanoi Public Transportation Authority



The PTA must have the resources and skills required for

- (i) Route network analysis and planning;
- (ii) The PTA must essentially be a market-oriented organization and must be sensitive to passenger demands;
- (iii) The organization should have the resources and the capacity to communicate with various foreign consultants, advisors, and suppliers connected with public transportation;
- (iv) The PTA must also be able to cope with the various legal aspects connected with the launching and evaluation of public tenders; and
- (v) It must also be able to handle a large budget with high demands on transparency and integrity.

It is important that the PTA is established early so that a regulatory and integrated framework for public transport development can be established before concessions are awarded to private companies.

Key Initiatives:

1. Technical Assistance on the establishment of a PTA (regulatory functions, asset ownership, coverage to include Light rail and buses, planning, O & M etc)
2. Draft Laws for the establishment of the PTA
3. Seed grant for the establishment of PTA

In establishing a PTA for the city it may be advantageous to capitalize on the capacities of existing transportation agencies in particular TRAMOC whereas TRANSERCO remains an operator. This would suggest that bus stops and other infrastructure should be handled by TRAMOC, as well as route maps, timetables, and websites.

8) Contracting out urban services and explore possibilities of privatizing Urban Service Providers in Water Supply, Garbage Disposal, and Sewage

The existing practice of contracting out urban services especially for infrastructure maintenance should continue and be expanded to new areas. This will provide greater opportunities for the private sector to participate and would generally lead to more efficient service delivery if well managed. The key operating agencies under this sector are HWBC (water supply), HWBC 2, HSDC (sewerage and drainage), and URENCO (garbage and night soil). All these agencies are currently answerable to HPC-TUPWS. There are now proposals for HWBC to be a state-owned holding company, while HWBC 2 has been instructed to be a subsidiary to the parent company. The general trend in many countries is to privatize water supply, solid waste collection and disposal, and sewerage services, while the regulatory function and the construction of the main infrastructure facilities remains the responsibility of government. In the interim period however many of the services could be contracted out to private operators.

Key Initiatives:

1. Contracting out urban services to private operators in the interim period
2. Feasibility Studies on the privatization/ equitization of key SOEs involved as urban service providers in particular HWBC and HSDC
3. Capacity Building and training of personnel in TUPWS, HWBC, HSDC, and URENCO .
4. Review regulations and establish guidelines on water quality standards, storm water management, separation and recycling of solid waste and waste water systems.

9) Improvement of Planning and Research Capabilities

Overall the planning and research capacities at the city level should be improved. There is a need for continuous training and education in urban development and transportation planning embodying sustainable development concepts. Planners need to be exposed and receptive to new planning methods and techniques that respond better to a market economy rather than the prescriptive form of planning that quickly goes out of date. The research and planning capacities of master planning agencies, such as the Hanoi Institute of Construction Planning (HICP), and SENA, as well as national planning institutes, such as NIURP could be improved. New urban development techniques, such as land readjustment, requires extensive skills and knowledge especially in the area of land survey, layout plans, preparation of replotting plans, land valuation, and consensus building. Similarly, the transportation planning capacities of TEDI and TDSI should also be enhanced. Again, at the city level there is a need to enhance the master planning and transportation planning capacities of HICP.

Planning capabilities at the district level are also weak. Under the Construction Law, districts are entrusted with the preparation of detailed plans. While the actual preparation of the plans may be outsourced to planning consultants, there may be a need to improve the planning capabilities at the district level to manage plan preparation and review the plan. This will also involve continuous monitoring of the development in the districts, carrying out surveys, and updating planning information preferably in GIS format.

Key Initiatives:

1. Training and capacity building of HAUPA/ HICP on land-use zoning , integrated land use –transport planning, urban design, landscape planning and environmental planning etc
2. Continuous training and skills upgrading program to be introduced in NIURP
3. Enhance development control capabilities in HAUPA and DPC
4. New land development techniques such as land readjustment, urban renewal, heritage and conservation management to be introduced

10) Training and Professional Recognition of Town Planners

As urbanization rates increase in Vietnam, there will be a need for more qualified town planners in the country especially in the urbanized regions and cities. In this respect the continuous training and professional qualification of town planners is important. Although Vietnam has an Association of Urban Planners there may be need to regulate and provide professional status to the profession. There may be a need to establish a Board of Town Planners that would prescribe the required qualification for registration as a professional town planner, the scale of fees and regulate the conduct of the profession. The Board should also evaluate the course curriculum of Town planning degree programs of the Universities for accreditation purposes to see that it conforms to the requirements of the profession. Practicing town planners are also required to attend seminars approved by the Board to acquire the minimum CPD (Continuing professional development) points to be entitled for registration the following year. In service training programs should also be conducted by government agencies such as HICP and NIURP in collaboration with overseas Planning Institutes and local Universities on short courses in urban planning, transport planning, project management, valuation and land management.

Key Initiatives:

1. Initiate discussions with the Vietnam Association of Urban Planners on the establishment of a Board of Town and Regional Planners.
2. Technical Assistance on the establishment of the Vietnam Board of Town Planners including study visits to countries that have established such as Board.
3. Prepare draft laws on the establishment of the Board
4. Introduce in- service training programs and seminars

15.6 Implementation Program

A summary of the main initiatives and proposals in this chapter is shown as a program for implementation in Table 15.6.1. The identified responsible agencies should take the lead in the key initiatives identified in the program.

Table 15.6.1 Institutional Arrangements for Plan Implementation

Institutional Arrangement for Plan Implementation		Responsible Agencies	SEDP 2006/2010					SEDP 2011/2015		SEDP 2016/2020	
			2006	2007	2008	2009	2010	2011	2015	2016	2020
1. Urban Planning Institutions	1) Assigning urban construction plans (Construction Law) for urban areas and land-use plans (Land Law) for areas outside urban areas	MOC, DAP, MONRE	■								
	2) Establishing a National Council for Construction (Urban) Planning	Central Govt/MOC/DAP				■	■				
	3) Establishing a Regional Planning Committee for Hanoi Metropolitan Plan	Central Govt/MOC/DAP				■	■				
	4) Enhancing the planning coordination functions of HPC/ HAPI to coordinate the SEDP, LUP, and CP	HPC/HAPI	■	■							
	5) Establishing an Housing Development Board for public housing and an Urban Redevelopment Authority for commercial redevelopment projects	DOF/HPC				■	■				
	6) Establishing the Hanoi Public Transportation Authority	HPC/DOF/MOT		■	■						
	7) Contracting out urban services and privatizing urban services (eg water supply, garbage disposal, sewerage)	HPC/TUPWS/HWBC/ HSDC	■	■	■	■	■	■	■	■	■
	8) Expanding urban planning capacities of District Planning Committees (DPC)			■	■						
	9) Providing training and professional recognition of town planners	MOC/ DAP/ NIURP/	■	■	■	■	■	■	■	■	■
	10) Traffic Management Training	TUPWS/ Traffic Police		■	■						
	11) Traffic Safety Program	TUPWS/ Traffic Police		■	■	■					
2. Urban Planning Systems	1) Introducing a planning permission system to complement the existing construction permit system	MOC/DAP/ HPC/HAUPA		■	■						
	2) Incorporating EIA , EMP as part of the planning permission system	HAUPA/ DONRE			■	■	■				
	3) Preparing manual on general, district, and action area planning	MOC/DAP/ HAUPA		■	■						
	4) Monitoring targets and indicators of General Plan and District Plan	HAUPA/ DPC		■	■	■	■	■	■	■	■
	5) Introducing GIS planning information system	HAUPA/ DPC			■	■					
	6) Preparing district plans to complement the City General Plan	All DPCs in Hanoi		■	■						

Institutional Arrangement for Plan Implementation		Responsible Agencies	SEDP 2006/2010					SEDP 2011/2015		SEDP 2016/2020	
			2006	2007	2008	2009	2010	2011	2015	2016	2020
	7) Reviewing the General Plan	HPC/HAUPA									
	8) Reviewing the district plans	All DPCs in Hanoi									
	9) Formulating comprehensive planning and design guidelines	NIURP/ HICP									
	10) Establishing participatory procedures in plan preparation	HPC/ HAUPA/ DPC									
	11) Formulating a comprehensive law on urban/regional planning including land readjustment and urban renewal	MOC/ DAP									
3. Urban Land Devt. and Management	1) Introducing land-use zoning system and applying use class tables to guide land-use development	MOC/ DAP/ HAUPA									
	2) Introducing regulations on: <ul style="list-style-type: none"> • Subdivision of land. • Transfer of Devt. Rights (TDR) • Use of underground space, air space • Wastewater treatment for new devt. areas 	MOC/ DAP/ MONRE									
	3) Introducing urban growth boundaries (UGB) to manage urban expansion and control urban sprawl.	MOC/ DAP/ MONRE/ HPC/ HAUPA/DPC									
	4) Improving land information system: <ul style="list-style-type: none"> • Computerized land registration system • GIS Cadastral and land information system • Annual Property market reports 										
	5) Expediting release of agricultural land for urban development in line with the General Plan/ District Plan	HPC/ DONRE/ HAUPA/ DPC									
	6) Adopting new urban devt. methods (ie urban renewal, land readjustment, urban conservation, etc.)	DAP/ NIURP/ HAUPA/ HICP									
Urban Sector Funding	1) Introducing property assessment taxes	HPC/ DOF									
	2) Introducing devt./betterment charges and contributions to the Infra. Service Fund as part of the devt. approval process	HPC/HAUPA									
	3) Expanding the mortgage market and regulations on foreclosure proceedings	MOF, MONRE									
	4) Contracting out urban services for infrastructure maintenance	HPC,TUPWS									
	5) Applying user charges, service fees, and tariffs for water supply, sewerage, drainage, garbage, utilities, etc.	TUPWS, HWBC, HSDC									
	6) Accessing capital markets and bonds and other urban finance schemes	MOF, MPI									
	7) Enhancing capacity of private property developers	HPC, MOF, DPI									
	8) Applying effective project implementation methods (eg BOT, deferred payment, land readjustment, etc.)	HPC, DPI									

15.7 Urban Sector Project Assistance

Urban sector project assistance may be necessary to establish suitable demonstration projects that would both be beneficial to city authorities and helpful in promoting new urban development and management practices in Hanoi. Some of these initiatives may already be promoted by donor agencies such as the World Bank, ADB, JICA, etc. Notwithstanding this, further consultations with both the client and donor agency may be necessary to define the scope of technical assistance needed (see Table 15.7.1). Selected urban development project assistance are further elaborated in the Project Identification Briefs which may include a combination of the project initiatives.

Table 15.7.1 Components of Urban Sector Project Assistance

Component	Urban Development Project Assistance
Urban and Regional Planning	1. National physical planning – national urban policy guidelines/ review of the Orientation Master Plan for Urban Development up to 2020
	2. Strategic regional development planning
	3. Strategic urban development planning for secondary cities
	4. District planning
	5. Action area planning
	6. GIS Planning Information System
Urban Development and Management	1. Urban land readjustment project (comprehensive land development through the provision of infrastructure and public facilities)
	2. Model urban redevelopment project
	3. Urban resettlement and public housing project
	4. Urban regeneration project (public-private partnership)
	5. Urban conservation project
	6. Model urban development around transit stations
	7. Urban village environmental improvement
	8. Urban Growth Boundary
Laws, Standards, and Guidelines	1. Comprehensive law on urban and regional development planning
	2. Manual on the Form and Content of General Plan, District Plan and Action Plan
	3. Planning permission system
	4. Subdivision guidelines/ regulations
	5. Review of planning standards and guidelines
	6. Land use Zoning and Use Class Tables
	7. Environment Impact guidelines by prescribed activities and preparation of Environmental Management Plans (EMP)
	8. Review of regulation and guidelines on water quality, storm water management, separation and recycling of solid waste and waste water systems
Urban Finance	1. Financing urban infrastructure services- cost recovery measures
	2. Enhancing municipal financial capacities
	3. Urban housing finance
	4. Land Valuation and property market reporting
	5. Property Assessment Taxes
	6. Betterment charges, development charges and infrastructure Service Fund
Administrative and Capacity Building	1. National Physical Planning Councils and Regional Organizations for metropolitan regional planning
	2. Institutional Arrangements for urban development planning and management in Hanoi
	3. Urban development training and education in HICP and HAUPA
	4. Capacity Building and Training of personnel in TUPWs, HWBC, HSDC and URENCO
	5. Rationalizing public urban development corporations into an Urban Housing Development Authority and an Urban Redevelopment Authority (consolidation strategy)
	6. Hanoi Public Transportation Authority
	7. Training module for effective urban land-use management and development control
	8. Enhancing community participation in urban / district development planning
	9. Cross-border urban development management
	10. Establishing a Professional Board of Town Planners

15.8 Proposed Implementation and Management Orientation

1) Goals and Objectives

Policies, plans, and projects must be implemented efficiently and effectively, as well as monitored regularly. Unless the implementation and management process is firmly established, the outcome of the plans would be economically, financially, socially, and environmentally unsatisfactory. Goals must thus be set toward the establishment of capable urban sector management institutions.

2) Proposed Strategies, Actions, and Strategic Projects

In order to ensure effective and efficient implementation and management, six strategies are set for which more concrete actions and strategic projects are proposed (see Figure 15.8.1). The basic strategies are as follows:

- (i) Reform of the urban planning system
- (ii) Expansion of development methods
- (iii) Improvement of the road management system
- (iv) Strengthening of sector funding capacity
- (v) Strengthening of public participation
- (vi) Strengthening of the planning capacities of institutions and staff

Strategic projects for priority action are the following:

- (i) Establishment of city planning database system which can be shared by all stakeholders
- (ii) Development of PPP project for the Ancient Quarter, French Quarter, and other areas
- (iii) Drafting of the urban planning law

Figure 15.8.1 Proposed Socio-economic Development Orientation



Objectives	<ul style="list-style-type: none"> • Ensure participation in urban development projects and opportunities. • Improve efficiency of urban administrative functions.
-------------------	--

Strategy	Action	Monitoring Indicator
J1 Reform of urban planning system	J11 Establish overall urban sector management policy J12 Draft a new urban planning and development law	<ul style="list-style-type: none"> • Progress of actions
J2 Expand development methods	J21 Review critically existing methods J22 Study alternative methods J23 Institutionalize alternative methods	<ul style="list-style-type: none"> • Progress of actions • Available institutions
J3 Improve road management system	J31 Improve land registration system J32 Accelerate confirmation of land-use rights registration	<ul style="list-style-type: none"> • Available institutions • No. of registrations
J4 Strengthen sector funding capacity	J41 Establish beneficiaries-pay principle and value capture mechanism J42 Expand borrowing capacity J43 Use ODA effectively	<ul style="list-style-type: none"> • Available institutions • Borrowings
J5 Strengthen public participation	J51 Institutionalize public participation on the process of planning and project implementation J52 Improve accessibility to information by the people	<ul style="list-style-type: none"> • Available institutions • No. of participatory opportunities
J6 Strengthen planning capacity	J61 Establish comprehensive urban planning database and information system J62 Provide adequate planning tools J63 Conduct training on planning	<ul style="list-style-type: none"> • Available institutions and systems • No. of persons trained

Strategic Projects	PJ1 Establishment of city planning database system which can be shared by all stakeholders PJ2 Development of PPP project for the Ancient Quarter, French Quarter, and other areas PJ3 Drafting of the urban planning law
---------------------------	---

Source: HAIDEP Study Team.

APPENDICES

APPENDIX 1A: Steering Committee and Working Group Meetings

Meeting	No.	Date	Participant
Steering Committee	First	22 Dec. 04	SC: 4, WG: 35, JICA: 16
	HPC meeting	18 Mar. 05	Chairman and Vice Chairman of HPC, WG: 12, JICA: 8
	Second	12 May 05	SC: 3, WG: 15, JICA: 22
	Third	13 Sep 05	Chairman and Vice Chairman of HPC, SC: 6; WG: 10; JICA: 4; EOJ: 1, JBIC: 1
	Fourth	31 Mar. 06	Vice Chairman of HPC, HPC: 3, SC: 4, WG: 13, JICA: 6, EOJ: 1, JBIC: 2
	Fifth	6 Feb. 07	HPC: 1, SC: 5, WG: 15, JICA: 8; EOJ: 2, JBIC: 1
Plenary WG	First	29 Dec. 04	WG: 26, JICA: 11
	Second	6 Aug. 05	WG: 20, JICA: 14
	Third	3 Nov. 05	WG: 40, JICA: 16
Urban Development WG	First	29 Jan. 05	WG: 15, JICA: 6
	Second	22 Jun. 05	WG: 10, JICA: 13
	Third	14 Jul. 05	WG: 15, JICA: 10
	Fourth	10 Jan.06	WG: 11, JICA: 4
Urban Transport WG	First	2 Feb. 05	WG: 10, JICA: 6
	Second	20 Jun. 05	WG: 12, JICA: 7
	Third	29 Jun. 05	WG: 8, JICA: 7
	Fourth	14 July 05	WG: 8, JICA: 7
	Fifth	28 Sep. 05	WG: 8, JICA: 4
	Sixth	12 Oct. 05	WG: 11, JICA: 7
	Seventh	21 Oct. 05	WG: 9, JICA: 6
	Eighth	20 Dec.05	WG:12 , JICA: 4
Urban Water and Sanitation WG	First	1 Feb. 05	WG: 5, JICA: 6
	Second	23 Feb. 05	WG: 11, JICA: 5
	Third	07 Jul. 05	WG: 9, JICA: 7
	Fourth	21 Jul. 05	WG:11, JICA: 6
	Fifth	14 Oct. 05	WG:8, JICA: 2
	Sixth	27 Oct. 05	WG:8, JICA: 6
	Seventh	14 Nov. 05	WG:6, JICA: 3
	Eighth	6 Jan. 06	WG:6, JICA: 2
Living Conditions	First	31 Jan. 05	WG: 7, JICA: 5
	Second	26 Jul. 05	WG: 15 , JICA:5
	Third	27 Oct. 05	WG: 7, JICA:6
	Fourth	21 Dec. 05	WG: 8 , JICA: 3
	Fifth	11 Jan. 06	WG: 8 , JICA:2

APPENDIX 1B: Meetings with Relevant Government Agencies

Level	Agency	Date	Discussion Topic
City Department	Hanoi Authority for Urban Planning and Architecture (HAUPA)	21 Jan. '05 1/25 Feb. '05 28 Apr. '05 6/20 May '05 17 Jun. 4/11/19/26 Oct. '05	<ul style="list-style-type: none"> • Master Plan of Hanoi City 2020 and its future orientation • Detailed plan and urban management of Hanoi • Future Population Framework for Hanoi • Land-use classification • Regional Planning • Plan for Integrated Urban Area • Location of new collective cemetery • Park Design Contest
	Hanoi Authority for Planning and Investment (HAPI)	28 Dec. '04 19 Jan. '05 23 May '05 09 Jun. '05 19 Aug. '05 12 Oct. '05	<ul style="list-style-type: none"> • Overall coordination with HAIDEP Study Team • Urban Water and Sanitation WG • Funding for urban development
	Department of Natural Resources and Environment (DONRE)	20/31 Jan. '05 21/23 Feb. '05 17 May '05 23/27 Jun. '05 7/18 Oct. '05	<ul style="list-style-type: none"> • Housing Development • Land management • Land-use planning 2010 • Water quality monitoring • Relocation of industrial establishments causing heavy pollution
	Department of Transport and Urban Public Works Services (TUPWS)	20/28 Jan. '05 09 May '05 09/10/21/29 Jun. '05	<ul style="list-style-type: none"> • Cooperation with WG members • Ongoing transport development • Urban water and sewerage system
	Department of Construction (DOC)	1 Mar. '05 10/15 Jun. '05	<ul style="list-style-type: none"> • Construction permission • Illegal construction
	Department of Culture and Information (DCI)	22 Mar. '05	<ul style="list-style-type: none"> • Cultural heritage protection • Regulations on advertisement on urban and rural areas
	Ancient Quarter Management Board	25 Jan. '05 9 Mar. '05 19 May '05	<ul style="list-style-type: none"> • Information on the project implemented in the Ancient Quarter • Vision on preserving and improving the Ancient Quarter
	Traffic Police	17 Jan. '05 18. Jul. '05	<ul style="list-style-type: none"> • Assistance in conduct of the survey • Data on accidents and vehicle registration
	Dept. of Agricultural and Rural Development (DARD)	23 Jun. '05	<ul style="list-style-type: none"> • Conversion of Agricultural Land • Management System of Agricultural Land
	Department of Tourism	12 Oct. '05	<ul style="list-style-type: none"> • Number of Tourists • Status & Orientation of Hanoi Tourism
Department of Finance	12 Oct. '05	<ul style="list-style-type: none"> • Funding for Urban Transport and Public Utilities 	
Ministries	Ministry of Construction (MOC)	16 Feb. '05 2/7 Mar. '05 25/27 Apr. '05 14 Jun. '05 5 Oct. '05	<ul style="list-style-type: none"> • Regional planning • Construction Law and its operation • Urban Design and park planning • Ongoing urban water supply projects • Social Housing Project & Housing Policy
	National Institute Urban and Rural Planning (NIURP)	23 Feb. '05 4/10/17 Mar. '05 01/15 Apr. '05	<ul style="list-style-type: none"> • Ongoing Hanoi metropolitan planning • Institutional framework on regional planning
	Ministry of Transport (MOT)	3 Mar. '05 23 Jun. '05	<ul style="list-style-type: none"> • Ongoing projects under MOT • Planning for Hanoi's Transport System

Level	Agency	Date	Discussion Topic
	Institute of Transport Development Strategy (TDSI)	27/31 Dec. '05 31 Dec. '05	<ul style="list-style-type: none"> Road inventory Provincial traffic condition
	Ministry of Finance (MOF)	08 Jul. '05	<ul style="list-style-type: none"> Financing strategy International experiences for financing
Ministries	Ministry of Natural Resources and Environment (MONRE)	19/26 Jan. '05 23 Feb. '05	<ul style="list-style-type: none"> Map information Land conditions in Hanoi City
	Ministry of Agricultural and Rural Development (MARD)	13 Jun. '05 28 Jun. '05 28 Oct. '05	<ul style="list-style-type: none"> Flood control Management of drainage water Transmission pipe identification Water quality data
	Ministry of Planning and Investment (MPI)	10 Jun. '05	<ul style="list-style-type: none"> Socio-economic development plan for Northern Focal Economic Zone
District PC	Hoan Kiem PC	23 May '05	<ul style="list-style-type: none"> Landscape management around Hoan Kiem lake
	Tay Ho PC	1/5 Jul. '05	<ul style="list-style-type: none"> Management of Lake
	Tu Liem PC	05 Jul. '05	<ul style="list-style-type: none"> Management of Lake
	Long Bien PC	06 Jul. '05 12 Oct. '05	<ul style="list-style-type: none"> Management of Lake District Planning
	Dong Anh PC	5 Oct. '05	<ul style="list-style-type: none"> District Planning
	Thanh Tri PC	12 Oct. '05	<ul style="list-style-type: none"> District Planning
Provinces	Vinh Phuc Province	1/14 Mar. '05 5 Jul. '05	<ul style="list-style-type: none"> Current situation and development orientation of Vinh Phuc province
	Ha Tay Province	16 Mar. '05 22 Mar. '05 July '05	<ul style="list-style-type: none"> Socio-economic situation Development trend
	Hung Yen Province	9 Nov. '05	<ul style="list-style-type: none"> Surface Water Supply in Hung Yen
Other Government Authorities	Hanoi Transport Company No.2	24 Dec. '05	<ul style="list-style-type: none"> Road inventory
	Green Trees and Park Company	05 Jan. '05 20 Jan. '05	<ul style="list-style-type: none"> Park and street tree inventory Operation and maintenance of parks
	Traffic Control Center	05 Jan. '05	<ul style="list-style-type: none"> Intersections and traffic lights
	Hanoi Water Business Company (HWBC)	27 Jan. '05 23 May '05 5/18 Jul. '05 11 Nov. '05	<ul style="list-style-type: none"> Urban water supply Operation and maintenance Financial issues
	Hanoi Sewerage and Drainage Company (HSDC)	11/25/27 Jan. '05 20 May '05 15/19/25 Jul. '05 16 Aug. '05 9 Nov. '05	<ul style="list-style-type: none"> Drainage facility and sewerage system Operation and maintenance Planning for sewerage and drainage system in Districts of Long Bien and Gia Lam Financial Issues
	Lighting and Urban Equipment Company	11 Jan. '05	<ul style="list-style-type: none"> Street lighting
	Hanoi Parking Company	12 Jan. '05	<ul style="list-style-type: none"> Public parking
	Hanoi Power Company	30 Jan. '05	<ul style="list-style-type: none"> Master plan 2020 Removal of electric poles
	Transport Management and Operation Center (TRAMOC)	25 Feb. '05 14/15 Mar. '05 2 Jul. '05	<ul style="list-style-type: none"> Bus operation
	Center for Environmental Engineering of Towns and Industrial Areas	29 Feb. '05	<ul style="list-style-type: none"> Water environment

Level	Agency	Date	Discussion Topic
	(CEETIA)		
	PMU for Nga Tu So improvement project	7 Jun. '05	<ul style="list-style-type: none"> • Land acquisition mechanism • Compensation for relocation
	Red River left bank infrastructure management unit	2 Jun. '05	<ul style="list-style-type: none"> • Progress of relevant projects
	Hanoi Railway Stations	2 Jul. '05	<ul style="list-style-type: none"> • Operation and Management of the Railway Stations
Others	Hoa-Lac High Tech Park	23 Dec. 05	<ul style="list-style-type: none"> • Information • Field survey • Progress of the project
	Environment Improvement Project in Hanoi- First Stage	4/24 Jan. '05	<ul style="list-style-type: none"> • Status of the ongoing project
	Vietnam Academy of Science and Technology	18 Jan. '05	<ul style="list-style-type: none"> • Monitoring of water quality in rivers and lakes
	Museum of Ethnology	21 Jan. '05	<ul style="list-style-type: none"> • Local communities in urban areas
	Relevant Companies in Industrial Parks	18-25 Feb. '05	<ul style="list-style-type: none"> • Companies' profile • Problems encountered and their assessment
	Institute of Sociology	21/23 Feb. '05	<ul style="list-style-type: none"> • Social environmental consideration
	University of Architecture	24 Feb. '05	<ul style="list-style-type: none"> • Urban design and landscape
	University of Civil Engineering	25 Feb. '05 19 May '05	<ul style="list-style-type: none"> • Urban design and landscape
	University of Science and Tech.	26 May '05	<ul style="list-style-type: none"> • GIS and Mapping system
	Funeral Service Board	14 Jun. '05	<ul style="list-style-type: none"> • Current situation of Cemetery
	Sena	20 Oct. '05	<ul style="list-style-type: none"> • District Planning
	Oceanography Sub-Institute	20 Oct. '05	<ul style="list-style-type: none"> • Subsidence
	University of Natural Science	1 Nov. '05	<ul style="list-style-type: none"> • Water environment in Hoan Kiem Lake and West Lake
Donors	World Bank	25 Jan. '05 24 Feb. '05	<ul style="list-style-type: none"> • Hanoi Metropolitan Plan (MOC) • Ongoing transport projects (Bus Rapid Transport) • Air quality monitoring system (WS)
	French government (Afd)	21 Jan. '05 24 Feb. '05 2 Mar. '05 16 Jun. '05 13 Jul. '05	<ul style="list-style-type: none"> • Feasibility Study of Tram Way • Hanoi Metropolitan Master Plan (MOC)
	ADB	28 Jan. '05 1 Mar. '05	<ul style="list-style-type: none"> • Low-income housing finance • Ongoing transport projects
	European Commission	28 Jan. '05	<ul style="list-style-type: none"> • Preservation project in Ancient Quarter