



Technical Assistance Report

Project Number: 51113-001
Knowledge and Support Technical Assistance (KSTA)
February 2018

Kingdom of Cambodia: Supporting Sustainable Integrated Urban Public Transport Development (Financed by the Japan Fund for Poverty Reduction)

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 10 February 2018)

Currency unit	–	riel/s (KR)
KR1.00	=	\$0.00025
\$1.00	=	KR4,018

ABBREVIATIONS

ADB	–	Asian Development Bank
CUTP	–	Comprehensive Urban Transport Plan
JICA	–	Japan International Cooperation Agency
MPWT	–	Ministry of Public Works and Transport
PPCC	–	Phnom Penh Capital City
TA	–	technical assistance
TMP	–	Transport Master Plan

NOTE

In this report, "\$" refers to United States dollars.

Vice-President	Stephen Groff, Operations 2
Director General	Ramesh Subramaniam, Southeast Asia Department (SERD)
Directors	Hiroaki Yamaguchi, Transport and Communications Division, SERD Samiuela Tukuafu, Cambodia Resident Mission, SERD
Team leader	Daisuke Mizusawa, Senior Transport Specialist, SERD
Team members	Ann Mushayt Alemania, Senior Operations Assistant, SERD Jan Hansen, Senior Country Economist, SERD Laurence Levaque, Social Development Specialist, SERD Marites Ortega, Project Analyst, SERD Nida Ouk, Senior Project Officer, SERD Ratha Sann, Senior Project Officer (Infrastructure), SERD Channarath Yim, Associate Operations Coordinator, SERD

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KNOWLEDGE AND SUPPORT TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 51113-001	
Project Name	Supporting Sustainable Integrated Urban Public Transport Development	Department /Division	SERD/SETC
Nature of Activity	Capacity Development, Policy Advice, Research and Development	Executing Agency	Ministry of Public Works and Transport
Modality	Regular		
Country	CAM		
2. Sector		Financing (\$ million)	
✓ Transport	Transport policies and institutional development		1.50
		Total	1.50
3. Strategic Agenda		Climate Change Information	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Climate Change impact on the Project	Low
Environmentally sustainable growth (ESG)	Urban environmental improvement		
4. Drivers of Change		Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Institutional development Organizational development	Effective gender mainstreaming (EGM)	✓
Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas Knowledge sharing activities		
Partnerships (PAR)	Bilateral institutions (not client government) Official cofinancing		
5. Poverty and SDG Targeting		Location Impact	
Geographic Targeting	Yes	Not Applicable	
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG11		
6. Risk Categorization		Low	
7. Safeguard Categorization Safeguard Policy Statement does not apply			
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		0.00	
None		0.00	
Cofinancing		1.50	
Japan Fund for Poverty Reduction (Full ADB Administration)		1.50	
Counterpart		0.00	
None		0.00	
Total		1.50	

I. INTRODUCTION

1. The proposed knowledge and support technical assistance (TA) will improve management of the urban public transport system in Phnom Penh to achieve a sustainable integrated system and promote its use by (i) developing policy guides and a planning toolkit for relevant public transport authorities; (ii) formulating candidate integrated urban public transport improvement programs; and (iii) providing capacity development training to the public transport authorities to improve their system management capacity, and public awareness-raising workshops to promote use of the system.
2. The TA is included in the Asian Development Bank (ADB) country operations business plan for Cambodia, 2018–2020.¹

II. ISSUES

3. The population of Phnom Penh, which is Cambodia's capital, increased from 1.00 million in 1998 to 1.69 million in 2013;² this trend is expected to continue, with the population forecast to increase to 2.41 million in 2020 and 2.87 million in 2035. It is expected that the number of all person trips, including to home, to work, to school, business and private by walking, motorbike, passenger car, and paratransit, will increase from 4.30 million trips in 2012 to 6.97 million trips in 2035. Urban areas have been expanding along major roads towards the west, north, and south, and beyond existing urban areas to the west.³
4. Traffic conditions in Phnom Penh are worsening. The country's economic growth has spurred a rapid increase in the number of vehicles, with a 350% increase in the number of registered vehicles from 2001 to 2012, while the average travel speed in the city center decreased from 22.9 to 14.6 kilometers per hour over the same period (footnote 3).
5. In line with the 2001 Transport Master Plan (TMP), which had a target year of 2015,⁴ the Government of Cambodia invested in road construction and improvement, intersection improvement, traffic signal installation, and traffic safety improvements. These investments have improved traffic conditions to some degree, but a 2015 review found that a public transport system and traffic management measures are required to effectively alleviate the worsening traffic conditions.⁵
6. In 2014, with support of the Japan International Cooperation Agency (JICA), the government reformulated the 2001 TMP and developed the Comprehensive Urban Transport Plan (CUTP) to improve people's mobility, maintain people- and environment-friendly urban conditions, and revitalize economic activities in Phnom Penh City by promoting a shift from a private-oriented urban transport system to a well-balanced system of public and private transport with a combination of public transport enhancement, traffic management improvement, and road network improvement. The CUTP is an updated TMP with a 2035 target date that is built on a traffic-demand forecast model; it includes an overall investment implementation plan, with an

¹ ADB. 2017. *Country Operations Business Plan: Cambodia, 2018–2020*. Manila. The TA first appeared in the business opportunities section of ADB's website on 2 October 2017.

² Government of Cambodia. 2013. *Cambodia Inter-Censal Population Survey 2013 Final Report*. Phnom Penh.

³ Government of Cambodia. 2014. *Comprehensive Urban Transport Plan in Phnom Penh Capital City (Final Draft), Executive Summary*. Phnom Penh.

⁴ JICA. 2001. *The Urban Transport Master Plan in the Phnom Penh Metropolitan Area*. Phnom Penh.

⁵ Government of Cambodia. 2015. *Overview of the Transport Infrastructure Sector in the Kingdom of Cambodia (5th Edition)*. Phnom Penh.

expected total investment cost of \$4.6 billion. It also includes medium-term (2017–2020) and long-term (2021–2035) action plans that define targets, actions, periods, and responsible agencies.

7. The action plans include three components: (i) public transport, involving completion of a basic bus network and implementation of rail transit, with 8 proposed actions; (ii) traffic management, comprising upgrading of signalized intersections and traffic demand management, (such as park and bus ride, parking measures, and improvement of the pedestrian walking environment and commodity transport), with 8 proposed actions; and (iii) roads, involving development of radial, ring, and inner city trunk road systems, and improvement of bottleneck intersections, with 13 proposed actions. Phnom Penh needs to implement the public transport and traffic management components, because the road network improvement alone is insufficient to improve traffic conditions.

8. The government and Phnom Penh Capital City (PPCC) have been implementing the medium-term action plan for the public transport and traffic management components with the support of development partners in an effort to meet travel demand resulting from Phnom Penh's growth, and to address worsening traffic conditions. PPCC introduced 3 bus routes serviced by 57 buses in 2014, and expanded up to 8 routes served by additional buses provided by the People's Republic of China and JICA in 2017. Also, JICA has upgraded 100 signalized intersections and is preparing a pilot bus priority lane. In addition, JICA and France plan to introduce an urban rail for the East–West transport corridor and a tramway as a part of the long-term action plan.

9. The public transport and traffic management components are emerging topics, and the government and PPCC officials require new standards and regulations to consistently plan, design, and implement actions (especially for mode interchanges) in the CUTP medium- and long-term action plans, in support of the development of a sustainable integrated urban public transport system. The development of standards and regulations will allow the officials to coordinate and manage the action plans to (i) improve accessibility from the travel starting point to the urban public transport system; and (ii) improve connectivity or integration among different modes (e.g., private vehicle, paratransit, walking and public transport), and within a mode (e.g., bus to bus). Meeting these needs is essential to ensure the urban public transport system plays a greater role in transit in Phnom Penh.

III. THE TECHNICAL ASSISTANCE

A. Impacts and Outcome

10. The TA is aligned with the following impacts: people- and environment-friendly urban conditions maintained, and urban activities in Phnom Penh City vitalized (footnote 3). The TA will have the following outcome: urban public transport system management improved.⁶

B. Outputs, Methods, and Activities

11. **Output 1: Sustainable integrated urban public transport policy guides and planning toolkit developed.** The TA will develop policy guides to regulate planning, design, and implementation of an integrated urban public transport system by articulating suitable measures and standards. With a focus on public transport and traffic management, the TA will review existing plans, standards, regulations, and planning practices; the operation and management of

⁶ The design and monitoring framework is in Appendix 1.

urban transport systems and public space; and the institutional settings of the authorities who plan, operate, and manage these. The TA will then assess infrastructure and people's needs, constraints, and behavior, through surveys of literature, traffic (through counts) and physical infrastructure along the existing and planned urban public transport network in Phnom Penh.⁷ Based on the prior activities, the TA will identify and propose suitable urban public transport measures and standards. The policy guides will cover integration of public transport, including waterways, pedestrian walkways, transit malls, and park and ride facilities; the use of public space, and control of public and private space around bus stops and urban rail stations; and operational tools and schemes (e.g., information and communication technology, and outsourcing to the private sector).⁸ Policies to promote the use of the public transport system will be (i) responsive to the needs of different segments of the population, especially women, the elderly, and people with disabilities; and (ii) grounded in theory, experience, and research. The policy guides will be used to prepare new transport regulations.

12. The TA will also develop a planning toolkit, with planning processes and tips built on good urban public transport system development practices, ensuring that the needs of different segments of the population will be identified and addressed during the planning process. It will be a comprehensive resource that will allow officials to develop a sustainable, integrated urban public transport system by identifying options (e.g., pedestrian subways, footbridges, and park and ride facilities) through assessments that consider technical, economic, financial, gender, environmental, and social aspects.

13. **Output 2: Candidate integrated urban public transport improvement programs formulated.** Based on output 1, the TA will work with government and PPCC officials to formulate candidate integrated urban public transport improvement programs, including scope and investment costs, for at least three planned or ongoing actions in the COTP medium-term and long-term action plans, and examine their feasibility through a preliminary feasibility study. The candidate programs will aim to improve safety, affordability, accessibility, and connectivity in the vicinity of bus stops and interchanges, urban rail stations, and major transit hubs of the action plans (which were developed and implemented with little coordination), and seek to maximize the efficacy of the urban public transport network.⁹

14. **Output 3: Urban public transport management capacity and awareness improved.** The TA will improve the capacity of officials to develop candidate integrated urban public transport improvement programs and manage an urban public transport system by providing training sessions using the deliverables in outputs 1 and 2. A study tour will be undertaken to review and discuss good practices—regarding traffic demand management, transit-oriented development, and urban public transport system planning and development, in terms of sustainability and social inclusion—with authorities and developers in the study tour destination country. The findings of the study tour will be incorporated in the deliverables of the two outputs. In addition, the TA will promote the use of the urban public transport system by raising public awareness on system

⁷ The Ministry of Public Works and Transport plans to apply the guidelines to other urban cities (i.e., Kandal, Siem Reap, and Baat Dambang) in the near future. A rapid assessment will be made as to whether the policy guides can be applied in the three cities, with consideration given to traffic and physical infrastructure similarities and differences.

⁸ JICA will develop a transport policy and technical specification related to an urban railway, a bus system, traffic management, parking management, paratransit management, and a fare policy. France plans to conduct a feasibility study and produce a policy and technical specification for a tramway. These products will be summarized and explained in the policy guidelines and toolkit.

⁹ If the government requests ADB to implement the candidate integrated urban public transport improvement programs, ADB will process a transaction TA (programmed for 2019 in the ADB country operations business plan for Cambodia, 2018–2020) to prepare a sustainable integrated urban public transport improvement project in 2021.

safety, security, and efficiency, and will reach out to both women and men by formulating a communication tool based on the two outputs.

C. Cost and Financing

15. The TA is estimated to cost \$1,545,000, of which \$1,500,000 will be financed on a grant basis by the Japan Fund for Poverty Reduction and administered by ADB. The key expenditure items are listed in Appendix 2. The following are ineligible expenditures: (i) purchase of vehicles, (ii) salaries for civil servants, (iii) scholarships or long internships, (iv) detailed engineering design, (v) civil works and other related expenses, and (vi) those under ADB's List of Ineligible Items (or Negative List) and Prohibited Investment Activities List.¹⁰

16. The government will provide counterpart support in the form of counterpart staff, office, access to information and reports, and other in-kind contributions.

D. Implementation Arrangements

17. The executing agency of the TA will be the Ministry of Public Works and Transport (MPWT), while the implementing agency will be the PPCC. The MPWT and PPCC will coordinate to successfully deliver the three outputs. The MPWT will be responsible for leading the development of the policy guides and toolkit under output 1. The PPCC will be the main beneficiary of the TA under outputs 2 and 3. The Transport and Communications Division of ADB's Southeast Asia Department will be responsible for TA administration, consultant recruitment, and consultant contract management. The TA is expected to be implemented from 1 April 2018 to 30 June 2020.

18. To effectively deliver and adopt the outputs, the MPWT and PPCC will each appoint one focal point officer, who will directly communicate with the consultants. To develop the sustainable integrated urban public transport policy guides, the MPWT and PPCC will form a task force with the support of the consultants. The task force shall include relevant authorities, such as the Ministry of Economy and Finance, and invite key representatives from the public transport industry, such as paratransit providers and bus operators. In addition, TA activities and deliverables will be shared with relevant agencies and development partners at the Infrastructure Regional Integration Technical Working Group chaired by MPWT and JICA.

Implementation Arrangements

Aspects	Arrangements
Indicative implementation period	April 2018–June 2020
Executing agency	Ministry of Public Works and Transport
Implementing agency	Phnom Penh Capital City ADB for TA administration, consultant recruitment, and consultant contract management
Consultants	To be selected and engaged by ADB QCBS 90:10, FTP 107 person-months \$1,380,000
Advance contracting	The consulting service is proposed for advance contracting.
Disbursement	The TA resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).
Asset turnover upon TA completion	The goods (indicatively, 5 computers, 5 computer software, 1 printer and photocopying machine, 1 video camera, 5 portable traffic counters, and 10 hand-held intersection traffic counters) will be turned over to the Ministry of Public Works and Transport and Phnom Penh Capital City upon TA completion.

¹⁰ A study tour under output 3 is justified with detailed description, objectives, and budget, and approved by the Government of Japan.

ADB = Asian Development Bank, FTP = full technical proposal, QCBS = quality- and cost-based selection, TA = technical assistance.

Source: Asian Development Bank.

19. **Consulting services.** ADB will engage a consulting firm based on the quality- and cost-based selection method using a 90:10 quality-cost ratio with full technical proposal, in accordance with ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.¹¹ Procurement to be financed by ADB will also be conducted in accordance with the Procurement Policy and associated instructions. An output-based, lump sum contract with a provision for fixed out-of-pocket expenditures will be considered for cost-effective, efficient TA implementation. It is expected that 37 person-months of international experts and 70 person-months of national experts are required to deliver the three outputs. The consultants will procure \$55,000 worth of goods (indicatively, 5 computers, 5 computer software packages, 1 printer and photocopying machine, 1 video camera, 5 portable traffic counters, and 10 hand-held intersection traffic counters) using the shopping method. The goods will be used by consultants and turned over to the MPWT and PPCC upon TA completion.

20. **Printed external publications.** Under output 3, the TA will produce illustrated publications suitable for wide distribution to raise public awareness regarding the safety, security, and efficiency of the public transport system. The target audience is composed of students and workers who are potential users of the urban public transport system in Phnom Penh.

21. **Social media and websites.** The TA will establish an exclusive site for urban public transport within the existing PPCC website to disseminate public awareness materials to be developed under output 3.¹² The website will be registered in ADB's fixed asset registry. After the TA completion, the PPCC will maintain the site to upload information relevant to public transport by allocating the necessary personnel.

IV. THE PRESIDENT'S DECISION

22. The President, acting under the authority delegated by the Board, has approved ADB administering technical assistance not exceeding the equivalent of \$1,500,000 to the Government of Cambodia to be financed on a grant basis by the Japan Fund for Poverty Reduction for Supporting Sustainable Integrated Urban Public Transport Development, and hereby reports this action to the Board.

¹¹ Terms of Reference for Consultants (accessible from the list of linked documents in Appendix 3).

¹² Phnom Penh Capital Hall. <http://phnompenh.gov.kh/en/>

DESIGN AND MONITORING FRAMEWORK

Impacts the TA is Aligned with			
People- and environment-friendly urban conditions maintained, and urban activities in Phnom Penh City vitalized (Comprehensive Urban Transport Plan in Phnom Penh Capital City) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
Outcome Urban public transport system management improved	a. Sustainable integrated urban public transport policy guides and planning toolkit adopted by 2023 (2018 baseline: Not applicable) b. New transport regulations adopted by 2023 (2018 baseline: NA) c. Candidate integrated urban public transport improvement programs adopted by 2023 (2018 baseline: NA)	a. PPCC's report b. PPCC's report c. PPCC's report	Turnover of MPWT and PPCC officials involved in the TA will lead to loss of momentum to adopt the TA outputs.
Outputs 1. Sustainable integrated urban public transport policy guides and planning toolkit developed 2. Candidate integrated urban public transport improvement programs formulated	1a. Policy guides for sustainable integrated urban public transport with sustainability and social inclusion considerations developed by 2019 (2018 baseline: Not applicable) ^b 1b. Planning toolkit for sustainable integrated urban public transport with sustainability and social inclusion considerations developed by 2019 (2018 baseline: Not applicable) ^b 2a. Candidate integrated urban public transport improvement programs formulated addressing sustainability and social inclusion considerations for at least three actions in the Comprehensive Urban Transport Plan action plans by 2019 (2018 baseline: Not applicable) ^b	1a. TA progress report 1b. TA progress report 2a. TA progress report	Turnover of trained MPWT and PPCC officials will lead to delay in TA implementation. Commuters prefer private transport to public transport.

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
3. Urban public transport management capacity and awareness improved	<p>3a. At least 50 MPWT and PPCC officials (20% of whom are female)^c with increased understanding of sustainable integrated urban public transport by 2020 (2018 baseline: Not applicable)</p> <p>3b. Public awareness-raising workshops, with women accounting for at least 50% of participants, on the use of urban public transport provided by 2020 (2018 baseline: Not applicable)</p>	<p>3a. TA progress report</p> <p>3b. TA progress report</p>	
Key Activities with Milestones			
<p>1. Sustainable integrated urban public transport policy guides and planning toolkit developed</p> <p>1.1 Review existing plans, regulations, and practices of planning, operation, and management of public space, land use, parking, urban transport, bicycle and pedestrian facilities, traffic calming, and transportation terminals, and the institutional settings of authorities (June–July 2018).</p> <p>1.2 Review infrastructure and the needs, constraints, and behavior of people (women, men, children, the elderly, and people with disabilities) through literature and surveys (June–August 2018).</p> <p>1.3 Identify and propose suitable measures and standards applicable to the city (August–November 2018).</p> <p>1.4 Develop draft policy guides (September–November 2018).</p> <p>1.5 Consult with stakeholders to get feedback on the draft guides and identify necessary regulations (November 2018).</p> <p>1.6 Finalize the policy guides (November 2018–February 2019).</p> <p>1.7 Formulate a draft planning toolkit (December 2018–June 2019).</p> <p>1.8 Draft proposed regulations (January–July 2019).</p> <p>1.9 Consult with stakeholders to get feedback on the draft toolkit (June 2019).</p> <p>1.10 Finalize the planning toolkit (June–July 2019).</p> <p>2. Candidate integrated urban public transport improvement programs formulated</p> <p>2.1 Formulate draft integrated urban public transport improvement programs (October 2018–February 2019).</p> <p>2.2 Discuss the draft programs with MPWT and the PPCC officials, and refine accordingly (March–May 2019).</p> <p>2.3 Propose final programs (June–July 2019).</p> <p>3. Urban public transport management capacity and awareness improved</p> <p>3.1 Provide training to MPWT and PPCC officials, including relevant female staff (August 2018–May 2020).</p> <p>3.2 Develop a capacity development and awareness program work plan (October 2018).</p> <p>3.3 Conduct a study tour and produce a summary report (October–November 2018).</p> <p>3.4 Produce and disseminate public awareness materials (November 2018–March 2020).</p> <p>3.5 Provide the public with awareness-raising workshops, reaching out to both women and men (January–March 2020).</p>			
Inputs			
Japan Fund for Poverty Reduction: \$1,500,000			
Note: The government will provide counterpart support in the form of counterpart staff, office, access to information and reports, and other in-kind contributions.			

Assumptions for Partner Financing

Not applicable

MPWT = Ministry of Public Works and Transport, PPCC = Phnom Penh Capital City, TA = technical assistance.

^a Government of Cambodia. 2014. *Comprehensive Urban Transport Plan in Phnom Penh Capital City (Final Draft)*, Executive Summary. Phnom Penh.

^b Sustainability and social inclusion considerations capture gender, environmental, and social aspects.

^c The proportion of female staff in MPWT and PPCC is currently very low.

Source: Asian Development Bank.



Hiroaki Yamaguchi
Director, SETC



Ramesh Subramaniam
Director General, SERD

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount
Japan Fund for Poverty Reduction^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	732.0
ii. National consultants	250.0
b. Out-of-pocket expenditures	
i. International and local travel	72.6
ii. Goods (purchase) ^b	55.0
iii. Surveys ^c	50.0
iv. Training, seminars, and conferences ^d	90.0
v. Reports and communications	48.8
vi. Printed external publications	20.0
vii. Miscellaneous administration and support costs	44.0
2. Training, seminars, workshops, forum, and conferences ^e	
a. Representation	10.0
3. Contingencies	127.6
Total	1,500.0

Note: The technical assistance (TA) is estimated to cost \$1,545,000, of which contributions from the Japan Fund for Poverty Reduction are presented in the table above. The government will provide counterpart support in the form of counterpart staff, office, access to information and reports, and other in-kind contributions. The value of government contribution is estimated to account for 3% of the total TA cost.

^a Administered by the Asian Development Bank.

^b The goods (5 computers, computer software packages, printer and photocopying machine, video camera, 5 portable traffic counters, and 10 hand-held intersection traffic counters) will be turned over to the executing agency upon TA completion.

^c The survey comprises traffic count surveys, and infrastructure condition surveys.

^d Training, seminars, and conferences comprise (i) 5 training sessions for 2 groups of the Ministry of Public Works and Transport and Phnom Penh Capital City staff and other agencies; (ii) 10 workshops for targeted groups of the public; and (iii) a study tour for 5 Ministry of Public Works and Transport officials and 5 Phnom Penh Capital City officials to review practices of public transport system development for 6 days, including travel.

^e Representation for (i) contract negotiations, and (ii) two ceremonies with representatives from the Embassy of Japan and the Japan International Cooperation Agency in Cambodia for the TA signing and TA completion.

Source: Asian Development Bank estimates.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/LinkedDocs/?id=51113-001-TARreport>

1. Terms of Reference for Consultants