

**PROJECT INFORMATION DOCUMENT (PID)
IDENTIFICATION/CONCEPT STAGE**

Report No.: PIDC27509

Project Name	City Bus Access Project
Region	SOUTH ASIA
Country	Bhutan
Sector(s)	Public administration- Transportation (20%), Urban Transport (80%)
Theme(s)	Other public sector governance (50%), City-wide Infrastructure and Service Delivery (50%)
Lending Instrument	Lending Instrument
Project ID	P156126
Borrower Name	Ministry of Finance
Implementing Agency	Thimphu Thromde, City Bus Co.
Environment Category	B - Partial Assessment
Date PID Prepared	30-Oct-2015
Estimated Date of Approval	07-Apr-2016
Initiation Note Review Decision	The review did authorize the preparation to continue

I. Introduction and Context

Country Context

Bhutan has a national population of approximately 757,979 people. Approximately 122,242 people live in the capital city of Thimphu. Despite a relatively small national population, Bhutan's urban areas are undergoing a significant transition. Between 1990 and 2010, the number of Bhutanese living in urban areas nearly tripled. Increasing rates of motor vehicle ownership and use have accompanied this trend bringing impacts on the urban environment (e.g. changes to land use, emissions, congestion, noise, etc.). In response, RGoB has both limited the import of private vehicles at times and increased taxes on upfront vehicle purchases. These measures have helped curtail the growth in private vehicle ownership. However, restrictions have also resulted in unmet needs for urban mobility. Most notably, Bhutan's urban public transport systems are still developing to meet increasing demand and customer expectations for higher quality of service. Less than one third of urban households in Bhutan reported using public transport in a given month in 2012. Improving the availability and quality of urban transport services in Bhutan offers an opportunity to meet the expanding demand for urban mobility through services that both align with the needs of lower income households and offer environmental benefits relative to private transport.

Sectoral and Institutional Context

Bhutan has a national transport strategy known as "Bhutan Transport 2040 Integrated Strategic Vision" which was published in June of 2013. This strategy frames a way forward for addressing transport sector challenges across various sub-sectors (roads, air, urban transport, etc.). The

Ministry of Information and Communications (MOIC) serves as Bhutan's lead policy institution for urban transport. Bhutan's national strategy for urban transport specifically identifies the priority activities listed below. The proposed intervention would specifically support items (ii), (iii), and (iv):

- (i) Review and updating of the existing structure plan based on the revised population and vehicle ownership forecasts, including the preparation of an urban transport plan;
- (ii) Improvement of the traffic engineering and management system, including better use of existing road space, provision of safety enhancements, and revision of traffic circulation;
- (iii) Development of public transport, including identifying measures to boost ridership based on several options, both for the short- and long term;
- (iv) Improvement of facilities for pedestrians, including a safe and secure network of routes and priorities within the central area;
- (v) Consideration of controls or restrictions on vehicle ownership and use in urban areas; and
- (vi) Conduct of a study on parking demand, establishment of a parking policy, and development of a package of regulatory measures.

Regulation of urban transport falls to Bhutan's Road Safety and Transport Authority (RSTA) which sits under MOIC. RSTA has a mandate for managing vehicle registration (including buses), setting bus and taxi fares, managing licensing, and regulating vehicle safety. RSTA undertakes 6 monthly safety checks of City Bus Co.'s buses to ensure compliance with relevant standards. The process of agreeing bus routes requires RSTA's final approval though route concepts originate from City Bus Co., Thimphu Thromde, and MoIC.

Public transport in Thimphu

Public transport services in Bhutan are varied and include the following:

- (i) City Bus Co. services within Thimphu. A fleet of 34 buses provide these services;
- (ii) Bus services offered by individual schools;
- (iii) Employer-specific buses (government and private); and
- (iv) Taxis (approximately 3,500) that operate both individual passenger services and shared ride services as market conditions warrant.

The Bank's rough estimate suggests that taxis account for roughly 28% of trips per day in Thimphu whilst bus services carry approximately 6% of trips per day. Taxis commonly serve as shared public transport with multiple passengers sharing rides to different destinations. Formal public transport services in Thimphu began in 1999 with a fleet of 2 buses. At present, the City Bus Co. operates a fleet of 32 buses that carry approximately 6,000 passengers per day. City Bus Co.'s staff have traditionally come from the postal services and have learned bus operations on the job. The City Bus Co. currently serves 10 bus routes in Thimphu with service headways ranging between 15 and 30 minutes. Individual buses show route numbers in their windshields, and there are individual route maps available on the RSTA website. Figure 3 shows the route map for the highest demand corridor along Thimphu's North-South axis. It is important to note that there is no up-to-date map showing City Bus Co.'s integrated route network.

Despite limited resources and no formal technical training, City Bus Co. has achieved many positive results. Most notably, between 2008/09 and 2013 annual operating subsidies fell from approximately US\$ 14,000 per bus to US\$ 6,100 per bus due to increased patronage and improved

revenue control. The management team of City Bus Co. achieved improved revenue control by riding as conductors on each bus route in order to set accurate revenue benchmarks by route. These serve to hold full-time drivers and conductors accountable for daily fare collection levels. While revenue benchmarking has not eliminated leakages entirely, it has achieved progress toward improving the City Bus Co.'s financial viability.

City Bus Co.'s management has also taken steps to promote pre-paid punch cards that avoid the need for cash transactions onboard buses. Pre-paid card sales have targeted students with City Bus Co. offering a 35% discount on nominal fares to encourage their purchase. This scheme has experienced mixed success. Pre-paid ticket sales were robust (approximately 1,000 cards sold). However, the scheme encountered problems when buses were too crowded during peak hours to carry everyone who had purchased pre-paid tickets. City Bus Co.'s management was forced to refund cards to disgruntled customers who eventually complained. Limited capacity on the bus network has inhibited City Bus Co. from attempting to expand the pre-paid punch card scheme.

Relative to other IDA countries in South Asia, Bhutan's public transport related institutions are strong. For example, the City Bus Co. has a functioning grievance redress mechanism for passengers. This currently consists of the City Bus Co.' manager's personal mobile number posted conspicuously on the inside of each bus. Despite its simplicity, this system reportedly handles approximately 6-10 complaints per day (mostly related to conductor's not issuing tickets once customers hand the m cash). Furthermore, In 2013, MoIC, Thimphu Thromde (the local government of Thimphu), and the City Bus Co. have developed preliminary plans for investments in stops and pedestrian infrastructure than can improve the attractiveness of bus services. These plans have remained unfunded to date. The proposed GPOBA intervention would help enable portions of these plans to move forward.

Relationship to CAS/CPS/CPF

The proposed operation supports Outcome 6: "Improved urban infrastructure management" under Results Area 3 of the 2015-2019 Bhutan CPS (approved August 24, 2014). One of the milestones under this outcome is to increase the number of beneficiaries from green transport initiatives.

II. Project Development Objective(s)

Proposed Development Objective(s)

to expand access to higher quality public transport and non-motorized transport services in Thimphu

Key Results

- (i) Civil works: (i) 77 new / improved bus shelters constructed and linked to pedestrian network; (ii) upgraded city bus terminal in downtown Thimphu;
- (ii) Service delivery: (i) 210,000 additional revenue-kilometers of bus services provided over the project period; (ii) 300,000 additional paying passengers carried on city bus services over the project period;
- (iii) Institutional reforms: (i) City Bus Co. transferred to Ministry of Finance; (ii) Public Service Contract executed between City Bus Co. and Thimphu Thromde;

III. Preliminary Description

Concept Description

Component A - physical infrastructure:

This component will support: (i) bus stop infrastructure including shelters, turnouts, lighting, and basic passenger amenities at 80 locations; (ii) pedestrian infrastructure connections to upgraded bus stops; and (iii) development of the city bus terminal. In order to be eligible for verification and disbursement of GPOBA subsidy, each new / upgraded bus stop will need to provide the following:

- (i) Direct access to a regular bus route served by the City Bus Co.;
- (ii) A covered space of not less than 102 meters;
- (iii) Seating for at least 5 waiting passengers under the covered space provided;
- (iv) Lighting in sufficient quantity to illuminate the entire covered area and adjacent pedestrian access points to the stop;
- (v) A protected, vandalism-resistant location for basic passenger information on routes, timetables, fares, and grievance handling;
- (vi) Drainage infrastructure as needed to move storm water away from the point of boarding / alighting and to ensure that the stop remains free from standing water throughout all seasons;
- (vii) Improved footpaths linking the stop to all other improved pedestrian access points within a 50 meter radius;
- (viii) Demarcated and safe pedestrian road crossings (i.e. zebra crossings, signage, and speed control devices where appropriate) at all pedestrian crossings within a 50 meter radius of the stop.

GPOBA will disburse a fixed unit rate subsidy upon the verification of each standard stop as summarized in E. Table 3. The upgraded city bus terminal will have a unique one-off subsidy payment tied to its completion. The envisaged approach to upgrading the city bus terminal will seek to use land value capture as a means for sourcing private investment to finance some portion of the new terminal's upfront costs. The portion of GPOBA subsidy tied to the central bus terminal's completion would offer a small capital grant to enable a greater level of investment than returns from retail space might otherwise support. During implementation, GPOBA and the Bank's team would review and provide a 'no objection' to the city bus stop's design specifications and conceptual design. Verification against these agreed contract specifications will subsequently govern the improved city bus stop's eligibility for disbursement. The team is seeking to collaborate with the International Finance Corporation's Thimphu based team on this particular aspect of Component A.

(iii) Thimphu Thromde will lead the implementation of Component A in close cooperation with the Ministry of Finance and City Bus Co. This will include the development of pedestrian access to bus stops, electricity connections to stops, and the establishment of safe pedestrian crossings across roads as needed to meet verification criteria. Budget for these investments will come to Thimphu Thromde from the Ministry of Finance and will be a covenant within GPOBA's Grant Agreement. Once developed, stop infrastructure will remain under Thimphu Thromde's ownership and control in perpetuity.

Component B - investments in service delivery assets:

This component will support the purchase and mobilization of: (i) 10 primary route buses; (ii) 7 secondary route buses; and (iii) a bus control system consisting of GPS monitoring and a centralized data control system. In addition, Component B would support one-off fare subsidies to encourage the adoption of cashless ticketing approaches that City Bus Co. is currently considering under support from the United Nations Development Program (UNDP). Potential solutions may include pre-paid punch cards, monthly / semi-annual passes, or full 'smart card' solutions. GPOBA subsidies would help to drive uptake among low income households of whatever cashless ticketing

solution City Bus Co. choses to adopt following UNDP's TA activity. During project preparation, the team will also investigate ways of using GPOBA's initial subsidy scheme to develop a longer term approach to targeting subsidies at lower income bus customers. This may eventually help City Bus Co. to improve its financial viability through higher fares whilst mitigating any adverse impacts on lower income households.

The Ministry of Finance will procure all goods and services under Component B and will immediately transfer all assets to the City Bus Co. for ownership and maintenance in perpetuity. The City Bus Co. will lead implementation of service delivery using assets transferred from the Ministry of Finance. Similarly, the City Bus Co. will lead the rollout of cashless ticketing systems and the targeted fare subsidy scheme involving GPOBA funds.

Verification of the following outputs will serve to trigger release of GPOBA's subsidy under component B: (i) additional revenue-kilometers of bus services provided; (ii) additional paying passengers carried on city bus services; (iii) sales of individual cashless tickets / cards. Technical assistance during project preparation will serve to define the baselines for additional revenue-km and paying passengers carried that will be attributable to the project.

Component C – verification, auditing, and implementation stage technical assistance:

This component will support: (i) independent verification of Disbursement Linked Indicators; (ii) annual audits of project funds; (iii) implementation stage technical assistance.

Implementation stage technical assistance will focus on two highly critical improvements that are needed to achieve DLIs:

(i) Improving maintenance of the bus fleet to make full use of operating assets. There is a particularly acute need to develop a preventative maintenance regime for buses given the extensive lead times often required for sourcing parts into Thimphu. To date City Bus Co has struggled with effective maintenance. During 2014 there were periods where 1/3 of the bus fleet was inoperable due to unplanned maintenance events and difficulties in sourcing spare replacement parts; and

(ii) Developing a passenger information system and marketing campaign aimed at encouraging more people to shift from private transport to public and non-motorized transport. As the quality and reliability of Thimphu's public transport network improves there may be an opportunity to expand the target market for bus services to higher income households and non-resident visitors. These higher income customers could eventually provide an important means for improving the financial viability of high quality bus services. To date, City Bus Co. has undertaken basic marketing steps such as branding buses with the recognizable logo "take a ride and be happy." and reaching out to parents of school children. However, there has been limited use of media, pricing incentives, and other techniques to shape demand.

There is a key opportunity to give passengers more control over trip planning by leveraging Thimphu's rapidly developing mobile internet network. The Ministry of Information and Communications reports that approximately there are approximately 117,549 people in Bhutan have a 3G internet connections via their mobile phones with the highest density of these connections in and around Thimphu. During 2013 alone, mobile broadband subscriptions increased by 529%. The team is therefore keen to pursue potential web-based applications for trip planning and has engaged with the Banks ICT team in this regard.

IV. Safeguard Policies that Might Apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	x		
Natural Habitats OP/BP 4.04		x	
Forests OP/BP 4.36		x	
Pest Management OP 4.09		x	
Physical Cultural Resources OP/BP 4.11		x	
Indigenous Peoples OP/BP 4.10		x	
Involuntary Resettlement OP/BP 4.12		x	
Safety of Dams OP/BP 4.37		x	
Projects on International Waterways OP/BP 7.50		x	
Projects in Disputed Areas OP/BP 7.60		x	

V. Financing (in USD Million)

Total Project Cost:	4.4468	Total Bank Financing:	0
Financing Gap:	0		
Financing Source			Amount
Global Partnership on Output-based Aid			4.4468

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