

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: PIDA26481

Project Name	Wuhan Integrated Transport Development (P148294)
Region	EAST ASIA AND PACIFIC
Country	China
Sector(s)	Urban Transport (90%), Public administration- Transportation (10%)
Theme(s)	City-wide Infrastructure and Service Delivery (90%), Municipal governance and institution building (10%)
Lending Instrument	Investment Project Financing
Project ID	P148294
Borrower(s)	People's Republic of China
Implementing Agency	Wuhan Urban Construction Utilization of Foreign Investment Project Management, Anlu City World-Bank Loan Project Management Office
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	28-Jul-2015
Date PID Approved/Disclosed	30-Jul-2015
Estimated Date of Appraisal Completion	
Estimated Date of Board Approval	24-Nov-2015
Appraisal Review Decision (from Decision Note)	

I. Project Context

Country Context

1. China is growing fast, but still remains a developing country. In 2013, China's per capita gross national income was US\$6,513, well below the world average of \$10,683. China is home to the world's second-largest number of poor, and the country's growth pattern has led to increasing economic, environmental and social imbalances.

2. Economic prosperity is concentrated on the eastern coast. The Wuhan Metropolitan Region (WMR) is located in Central China. Using income and poverty as a lens, China's central and western regions, home to 55 percent of the population, are lagging behind coastal cities. In Eastern China, per capita disposable income of urban households is RMB 32,472 yuan/year while it is only RMB 22,736 yuan/year for Central China. The per capita disposable income of urban households in the WMR is even less-RMB 20,681 yuan/year. The Government of China (GoC) launched the "Rise of Central China" program to propel the economic growth of Central China.

3. The GoC has selected the WMR as a pilot to apply the "Two-Oriented Society" strategy. This strategy emphasizes the integrated development of the central city in the Metropolitan Region (MR) and its surrounding cities by balancing resources and services in a sustainable manner. In the WMR this approach, named the "1+8 Wuhan Metropolitan Area", is a city cluster formed by eight smaller cities within a 100 kilometer (km) radius of the core city, Wuhan. The 1+8 cluster has a population of 30.8 million inhabitants. Wuhan is the largest city with a population of 10.1 million. Anlu, a small city with fewer than 200,000 inhabitants, is located within the Xiaogan Municipality, one of the eight peripheral cities in the cluster.

4. This is one of the first pilot demonstrations of regional planning in China, with the vision of achieving a more balanced and sustainable development pattern in the WMR, as compared to the less-thought-out agglomerative patterns of metro regions on China's eastern coast. Part of this vision is that the regional economy will grow less dependent on Wuhan (the 1) over the years by developing new engines of economic growth and offering higher standards of living in the surrounding cities (the 8).

5. Improving transport within the 1+8 Region is critical for connectivity, integration and the overall economic functioning of the MR. Poor transport can keep the urban labor market from functioning efficiently and can constrain urban economic growth. Poor transport also increases the urban area's carbon footprint. In the WMR, rail networks are under construction. Wuhan itself is in the midst of an unprecedented construction boom to upgrade transport infrastructure through a metro system and an urban expressway network. Anlu has ambitious plans to steer urban and population growth in a sustainable manner; for example, by promoting and improving public transport to make it an alternative to cars. Therefore, an initial element for improving the integration between Wuhan and Anlu is to improve the intercity transport options. As such, the project includes the establishment of one intercity railway local bus interchange station and one intercity long-distance bus terminal. The wider range of transport improvements in Anlu responds to the goal of enhancing the local economy and quality of life.

6. The Wuhan Municipal Government (WMG) is also aware that it requires a new generation of technologies and information systems to manage urban transport and related urban planning decisions in a more efficient manner. Under national Smart City Initiatives, Wuhan has been implementing a series of information systems that bring an increasing number of public services online. Expected key benefits are the sharing of data among different agencies and an increase in the availability of data to the public. It seeks to utilize the existing transport network more efficiently and thus could free up resources to fund other transport facilities or measures in other sectors such as education and health.

7. The proposed operation is the third urban transport project that the Bank will finance in Wuhan. The first (Wuhan Urban Transport Project [WUTP], P069852) was approved in March 2004 and completed in December 2010. The second is the Wuhan Second Urban Transport Project (WSUTP, P112838), which was approved in March 2010 and is still ongoing. The progress toward achieving the project development objective (PDO) of the WSUTP is rated as moderately satisfactory and implementation progress is rated as moderately unsatisfactory. Delays in securing the counterpart funds needed to implement the project explain these ratings, which are being resolved. A second order for restructuring was approved in June 2015.

8. The Anlu Municipal Government is also part of this project. It was chosen by Chinese authorities because it is typical of small, county-level cities within the WMR 1+8 cluster. Anlu plans significant investments in its transport system to improve public transport through integrated corridors - a comprehensive approach that improves the entire corridor by giving priority to public transport and non-motorized transport (NMT)-as well as additional sidewalk improvements. Anlu wants to lay the foundation for a transit system that is an alternative to cars. In this way, Anlu can become an attractive city in itself with a working labor market, thanks to improved transport, while being integrated with the rest of the WMR.

Sectoral and institutional Context

9. China's rapid motorization has severe negative impacts. Along with its rapid economic growth and urbanization, China is also experiencing rapid motorization. In 1995, there were 2.5 million private motor vehicles; by 2013 this total reached 105 million. Although the motorization level of 67 cars per 1,000 people is still very low compared to wealthier countries, China is suffering from congestion, air pollution, and poor road safety.

10. Wuhan also follows this motorization pattern, and the poor bear a higher burden of these negative impacts. The city remains congested even with about 130 cars per 1,000 population and 224 km of urban expressways. In 2010 Wuhan had 61 congested intersections; by 2012 it had 116. Congestion particularly hurts the poor who must take buses that share the roads with cars, because buses are more efficient than cars at carrying people. Poor people-as pedestrians and cyclists-in developing countries also disproportionately bear the higher burden of injuries and fatalities.

11. Integration among different modes of transport is crucial to tackle congestion. Anlu has the potential to exploit its connectivity to Wuhan and to the overall MR, but the city needs to improve its emerging public transport system to integrate it with the regional system, e.g., the rail station, and thus take advantage of the enhanced connectivity. At the local level, although the use of NMT "walking, cycling, and e-bikes" is more convenient for a small city, there is a need to ensure that these sustainable modes are not further eroded by rapid motorization. Measures will be necessary to preserve this NMT advantage in the future, further increase the public transport modal share, and reduce dependence on private vehicles.

12. Wuhan has already invested in Intelligent Transport Systems (ITS) and built the foundations for "smart" transport planning, management and monitoring. The city has taken steps to address these challenges and has invested in several ITS components. In recent years, Wuhan City agencies have implemented systems, including: (a) Area Traffic Control (ATC) signals; (b) closed-circuit television (CCTV) traffic monitoring cameras; (c) e-police enforcement cameras; (d) a traffic guidance system; (e) public bus monitoring and dispatch systems; (f) a "floating car" taxi monitoring system; (g) bridge and tunnel electronic toll collection (ETC) systems; (h) a highway toll collection system; and (i) a public transport monitoring system using Smart Cards. In addition, mobile-including mobile broadband (3G/4G)-penetration is very widespread in Wuhan, with extensive social media penetration, and provides a good foundation for the provision of access to data and information through smart phone Apps as well.

13. A key step at this stage is the integration of and data capture from Wuhan's multiple ITS components and modules. Separate agencies manage these modules without standardization or interoperability, and data or information sharing has been limited. Analysis undertaken are also

disaggregated, thus limiting their benefits and applicability. The project offers an excellent opportunity to apply leading-edge technologies to increase data capture (e.g., a variety of sensors/monitoring equipment "Internet of Things" [IOT]); analytical tools and techniques for handling large data volumes ("big data/analytics") and cloud computing to facilitate the more effective and efficient sharing of information-system infrastructure and resources. For example, sensors/monitoring equipment can be shared among different agencies; data on land use, demographics and infrastructure, as well as vehicle and passenger information, can be integrated for better management and decision making. Non-compatible legacy systems will be progressively phased out and superseded by a unified portal. Developing such a "one-stop" portal for all of Wuhan's ITS and associated systems will facilitate more widespread access to data and information, and provide powerful tools for analysis and decision making.

14. **Strategic and Local Integration Proposed.** Therefore, the proposed project comprises transport integration measures at strategic and local levels, and contains a range of information and communications technology (ICT) investments and physical on-street measures. The project will focus on using technology to enable more seamless trips and reduce congestion; improving public transport and NMT; and enabling more equal access to transport for all sectors of society, especially the poor. Thanks to these features, the project will also help to achieve a more integrated and therefore balanced urban development pattern in the WMR.

II. Proposed Development Objectives

The PDO is to improve transport services and management in Wuhan and Anlu Cities.

III. Project Description

Component Name

Component 1. Integrated Corridor and Road Safety Improvements in Anlu

Comments (optional)

Component Name

Component 2. Public Transport Improvements in Anlu

Comments (optional)

Component Name

Component 3. Intelligent Transport System for Wuhan

Comments (optional)

Component Name

Component 4. Technical Assistance for Anlu and Wuhan

Comments (optional)

IV. Financing (*in USD Million*)

Total Project Cost:	244.66	Total Bank Financing:	120.00
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Financing Gap:	0.00	
For Loans/Credits/Others		Amount
Borrower		124.66
International Bank for Reconstruction and Development		120.00
Total		244.66

V. Implementation

15. The Wuhan Project Management Office (WPMO), housed in the Wuhan Municipal Government's Urban Construction Fund Management Office (WUCFM), will be the primary coordinating body for both Wuhan and Anlu, and will be responsible for communications with the World Bank. It will be entrusted with overall project management and, through its units, with coordinating and directing procurement implementation, contract management, resettlement, social and environmental safeguards; coordinating and assisting with loan disbursement requests, fiduciary compliance, evaluation and results monitoring, reporting, and coordination among the different implementing entities.

16. The Anlu Municipal Government (AMG) created the Anlu Leading Group (ALG), chaired by a vice mayor, and under it the Anlu Project Management Office (APMO). The APMO will be the primary coordinating body responsible for communications with the World Bank, and will ensure consistency of implementation with all relevant World Bank policies and procedures, and continuity and better coordination among the different implementing entities and related agencies. The APMO also has safeguards responsibilities. To support the APMO's implementation activities, the Anlu Urban Construction Investment Development Co., Ltd. (AUCIC) will serve as the PIU and therefore will act as the project management support agency to manage activities for project implementation on behalf of the Anlu Construction Bureau. The AUCIC will have financial management (FM) and procurement responsibilities. Annual project counterpart funds will be included and approved in an annual plan under the Anlu Urban Investment and Financial Management Committee.

17. The Wuhan Leading Group (WLG), established in 2007, is headed by the vice mayor responsible for urban construction and is composed of leaders and directors of some 24 government line agencies. The WLG will be maintained throughout project implementation with functions and membership satisfactory to the Bank, and will meet on a regular basis (twice a year) and upon request of the WPMO when important issues arise. In addition, to promote the construction of scientific and intelligent urban operation systems in Wuhan, the WMG set up the Wuhan Intelligent Urban Construction Leadership Team (WIUCLT) in June 2013. The WLG and WIUCLT will be the two municipal-level decision-making groups in charge of the project's strategic steering.

18. In Wuhan, in addition to the WPMO, whose overall functions, including safeguards, are described above, there will be also a PIU, the Wuhan Transport Development and Strategy Research Institute (WTDSRI). The WTDSRI will have FM and procurement responsibilities and will provide technical and implementation support to the WPMO because of its expertise in information and communication technologies (ICT) as related to the project. The WTDSRI will also be in charge of financing and repayment, construction of the project, and maintenance after implementation. Annual project counterpart funds will be included and approved in an annual plan under the Wuhan Urban Construction Investment and Financing. Annex 3 explains the implementation arrangements in greater detail.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
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

Comments (optional)

VII. Contact point

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