I. Project Context

Country Context
Over the past three decades, rapid economic development in China, supported by steady urbanization, has lifted more than 500 million people out of poverty. Urbanization created a supportive environment for growth with abundant labor, cheap land and good infrastructure. Urbanized population grew from 30 percent in 1996 to 50 percent in 2010, a rapid pace compared to other countries. Such urbanization is anticipated to continue for the next two decades with an expected 1 billion Chinese urban residents by 2030. While China has avoided some of the common ills of urbanization, notably slums and urban unemployment, its cities are faced with major environmental challenges and social inequities. China’s leadership is well aware of these challenges, and has called for a new model of urbanization to match China’s evolving development goals and meet such emerging challenges.

Urbanization in China has been accompanied by deep changes in the overall mobility and accessibility patterns of urban residents. Cities rapidly spread out as a result of increased real estate cost, incentives for the cities to convert rural land in urban land in peri-urban areas, and improved road infrastructure. This led to rapid motorization with a 25 percent annual growth in private cars, and a steady drop in the number of trips made by biking and walking as distance increased. While private cars have supported socioeconomic development and enhanced mobility at an individual
level, they have also brought about a range of adverse economic, environmental and social impacts, including increased traffic congestion, air pollution, fossil fuel consumption, greenhouse gas emissions and road accidents. For the poorer and more vulnerable members of the society, as well as the lower income group, the rapid growth in private cars also failed to address the need for affordable mobility and equal accessibility.

In response to these growing challenges, the China State Council decided to make public transport a national policy priority, by adopting a directive on Prioritization of Urban Public Transport Development on December 29, 2012. The directive provides a new framework for public transport, drawing on lessons learned from the past. It lays out four broad principles: (i) the provision of convenient services to users; (ii) the provision of integrated and interconnected transport services closely integrated with urban master plans and long term land use; (iii) the pursuit of green development with an emphasis on efficient and high capacity rapid transit systems on major corridors; and (iv) the determination of solutions that are context sensitive and appropriate.

The central government launched a transit metropolis program to support the implementation of such policy in a number of pilot cities. Transit metropolis aim at gradually achieving a high mode share of motorized trips for public transport. For larger cities, this entails developing a mass transit system, working as a backbone for public transport. As a result Chinese cities have been increasingly investing in public transport infrastructure and services, particularly in urban rail. By the end of 2013, 19 Chinese cities were operating urban rail systems with over 2,500 kilometers of track and 31 cities had urban rail plans approved. Approximately 5,000 kilometers of urban rail is either in operation, under construction or under preparation.

**Sectoral and institutional Context**

Henan Province is a central province of China ranking 23 out of 31 provinces (including the four province-level municipalities) in terms of gross regional product per capita. Zhengzhou is the capital city of Henan Province located in central China and has always been a critical transportation and communication node in history. By the end of 2012, the city of Zhengzhou covered an area of 1010 square kilometers with a population of 4.4 million. Urban built-up area reached 373 square kilometers and its urbanization ratio reached 66.3 percent. In 2012, Zhengzhou’s GDP reached RMB 554.7 billion (approximately US$91.5 billion equivalent), a 12 percent increase over the previous year, with an average GDP per capita of RMB 63,300.

Zhengzhou is rapidly expanding like many other Chinese cities. According to its Master Plan (2009-2020), the urban built-up area of Zhengzhou is expected to reach 400 square kilometers and its urbanization ratio is expected to reach 80 percent by 2020. In addition to the existing city core, the city has planned to develop 7 other functional zones located along the east-west and north-south axes. Significant development, including major residential housing development, is taking place in these zones. This provides an opportunity for the low- and middle-income people to own their first apartments in Zhengzhou.

Urbanization has been accompanied by rapid motorization and its consequences in Zhengzhou. By the end of 2012, total auto car ownership in the city of Zhengzhou exceeded 684,000 with an average ownership of 155 vehicles per thousand capita. Traffic surveys indicated that the share of private car trips among all modes grew from 3.7 percent in 2007 to 7.5 percent in 2010. Public transport accounted for about 13.6 percent of total daily trips – relatively low compared to cities
with similar sizes and GDP such as Changsha (24.5 percent) or Wuhan (23.4 percent). The motorized transport mode share in Zhengzhou in 2010 was still low (about 25 percent) but growing rapidly. Major corridors in the downtown area are already experiencing severe traffic congestions during peak hours and it is estimated that the travel speed in the city center will drop to 13.5 kilometer per hour by 2015.

Zhengzhou Municipality (ZM) aims at developing an efficient and sustainable integrated urban transport system that anticipates the needs arising from its urban development. It has adopted the following strategies to guide urban transport development: (i) public transport priority; (ii) integrated transport and land use development; (iii) seamless multi-modal integration; and (iv) travel demand management. Consequently, specific targets to be achieved by 2020 have been set up, including: (i) public transport mode share to reach 35 to 40 percent; (ii) all trips between any two points within the downtown area not to exceed 45 minutes; and (iii) urban transport infrastructure investment to account for no less than 3 percent of GDP and at least half of it invested in public transport.

ZM sees urban rail as the backbone of such an integrated urban transport system, able to provide efficient and affordable mobility for all residents, especially those that live on the outskirts of the city, as well as to attract passengers with growing expectations in terms of service quality and comfort. In 2010, it developed an urban rail network plan consisting of 6 lines, totaling 220.8 kilometers and 159 stations. Line 3, proposed in Zhengzhou's second round of Urban Rail Construction Plan (2013-2019) and to be financed under the proposed project, will have 25.2 kilometers with 21 stations, one depot and one parking yard. It runs through the existing city core and several functional zones that are identified to be the key areas of development in the master plan. ZM expects to start the construction of Line 3 in end 2014 and put it in operation by 2019.

Bus services in Zhengzhou will be re-organized in accordance based on the urban rail network to better feed the urban rail. By the end of 2011, the Zhengzhou Bus Company (a state-owned enterprise) was operating 238 bus routes with 5,153 buses, including 12 Bus Rapid Transit (BRT) routes with 380 BRT buses. Total daily bus ridership reached over 2.5 million. The bus company has launched specific studies on bus-rail integration which plan for bus route re-organization and bus-rail interchange facility for each urban rail line respectively. In addition, performance-based guidelines on the integration of multi-modal public transport system in Zhengzhou are being developed, supported under the GEF-China Urban Transport Partnership (CUTP) Project (P090335), to optimize the transfer among regular bus, BRT and urban rail with respect to physical integration, information service, fare and ticketing. These guidelines are expected to be applied to Line 3 as a pilot and analysis will be conducted to evaluate Line 3’s impact on people’s accessibility at a few selected stations.

II. **Proposed Development Objectives**

The proposed project development objective (PDO) is to improve urban mobility for the population of Zhengzhou located along the catchment area of Line 3 from Xin Liu Lu Station to Hang Hai Dong Lu Station.

III. **Project Description**

**Component Name**

Component 1: Construction of Line 3
Comments (optional)

**Component Name**  
Component 2: Equipment for Line 3
Comments (optional)

**Component Name**  
Component 3: Design, Construction Management and Technical Assistance
Comments (optional)

**Component Name**  
Component 4: Safeguards and Other Construction Costs
Comments (optional)

### IV. Financing (in USD Million)

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### V. Implementation

Henan Province, through the Henan Provincial Finance Department (HPFD), will sign the Project Agreement and be the Project’s formal implementing entity, responsible for managing, coordinating and monitoring the Project implementation. It will delegate most of these responsibilities to ZM, represented by the Zhengzhou Municipal Finance Bureau (ZMFB). Henan Province will enter into a subsidiary agreement to make the proceeds of the loan available to ZM and through ZM to the URC. The URC will be the final debtor and will be responsible for repaying the subsidiary loan.

To provide governance and leadership for project preparation and implementation at the municipal level, a Project Leading Group (PLG) was established by ZM in November 2011. The PLG is chaired by the Vice Mayor of Zhengzhou Municipal Government (ZMG) and composed of leaders from all relevant municipal line agencies. It will meet regularly and on as needed basis during implementation, to review project progress and address key issues that arise.

A Project Management Office (PMO) has been established at the ZMFB, chaired by the Deputy Director of the ZMFB and comprising officials from all relevant municipal agencies. The PMO, through the URC, will be responsible for the daily operations of the project, including project management, technical preparation, construction management, environmental and social safeguards, procurement, financial management, and project monitoring and evaluation (M&E) in accordance with the Bank’s policies and guidelines.
VI. Safeguard Policies (including public consultation)

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Comments (optional)

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