Report and Recommendation of the President to the Board of Directors

Project Number: 44007-013
September 2012

Proposed Loan
People’s Republic of China: Jiangxi Fuzhou Urban Integrated Infrastructure Improvement Project

Asian Development Bank
CURRENCY EQUIVALENTS
(as of 6 September 2012)

Currency unit — yuan (CNY)
CNY1.00 = $0.15747
$1.00 = CNY6.35030

ABBREVIATIONS

ADB – Asian Development Bank
BRT – bus rapid transit
FIDC – Fuzhou Investment and Development Company
FMG – Fuzhou Municipal Government
GEF – Global Environment Facility
km – kilometer
LIBOR – London interbank offered rate
PMO – project management office
PRC – People’s Republic of China

NOTE

In this report, "$" refers to US dollars.

Vice-President
S. Groff, Operations 2

Director General
R. Wihtol, East Asia Department (EARD)

Director
T. Duncan, Transport and Communications Division, EARD

Team leader
S. Lewis-Workman, Senior Transport Economist, EARD

Team members
R. Araojo, Senior Operations Assistant, EARD
T. Bisht, Social Development Specialist, EARD
X. Chen, Transport Specialist (Railways), EARD
C. Chu, Senior Portfolio Management Officer, EARD
A. Heckmann, Urban Development Specialist, EARD
S. Hung, Senior Social Development Specialist (Gender and Development), Regional and Sustainable Development Department (RSDD)
E. Infante, Project Analyst, EARD
S. Kawazu, Senior Counsel, Office of the General Counsel
K. J. Kim, Transport Specialist, EARD
G. O’Farrell, Environment Specialist, EARD
L. Wright, Senior Transport Specialist, RSDD

Peer reviewer
B. Goalou, Urban Development Specialist (Transport), Central and West Asia Department

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# PROJECT AT A GLANCE

1. **Project Name:** Jiangxi-Fuzhou Urban Integrated Infrastructure Improvement Project  
2. **Project Number:** 44007-013

3. **Country:** People's Republic of China  
4. **Department/Division:** East Asia Department/Transport and Communications Division

5. **Sector Classification:**

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Primary</th>
<th>Subsectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport, and information and communication technology</td>
<td>√</td>
<td>Urban transport</td>
</tr>
</tbody>
</table>

6. **Thematic Classification:**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Primary</th>
<th>Subthemes</th>
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<tbody>
<tr>
<td>Economic growth</td>
<td>√</td>
<td>Promoting economic efficiency and enabling business environment</td>
</tr>
<tr>
<td>Environmental sustainability</td>
<td></td>
<td>Urban environmental improvement</td>
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6a. **Climate Change Impact**  
No Climate Change Indicator available.

6b. **Gender Mainstreaming**

<table>
<thead>
<tr>
<th>Theme/Indicator</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Gender equity theme (GEN)</td>
<td></td>
</tr>
<tr>
<td>Effective gender mainstreaming (EGM)</td>
<td>√</td>
</tr>
<tr>
<td>Some gender benefits (SGB)</td>
<td></td>
</tr>
<tr>
<td>No gender elements (NGE)</td>
<td></td>
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7. **Targeting Classification:**

<table>
<thead>
<tr>
<th>General Intervention</th>
<th>Targeted Intervention</th>
<th>Income poverty at household level</th>
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</thead>
<tbody>
<tr>
<td>Geographic dimensions of inclusive growth</td>
<td>Millennium development goals</td>
<td></td>
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8. **Location Impact:**

<table>
<thead>
<tr>
<th>Region</th>
<th>Type</th>
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<tbody>
<tr>
<td>Regional</td>
<td>Low</td>
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<tr>
<td>Urban</td>
<td>High</td>
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</table>

9. **Project Risk Categorization:** Complex

10. **Safeguards Categorization:**

| Environment | A                         | Involuntary resettlement | A                      | Indigenous peoples | C                       |

11. **ADB Financing:**

<table>
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<th>Sovereign/Nonsovereign</th>
<th>Modality</th>
<th>Source</th>
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<td>Total</td>
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12. **Cofinancing:**

No Cofinancing available.

13. **Counterpart Financing:**

<table>
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<tr>
<th>Source</th>
<th>Amount ($ Million)</th>
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<tr>
<td>Government</td>
<td>126.5</td>
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<tr>
<td>Total</td>
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14. **Aid Effectiveness:**

<table>
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<th>Suggestion</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Parallel project implementation unit</td>
<td>No</td>
</tr>
<tr>
<td>Program-based approach</td>
<td>No</td>
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</table>
I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to the People’s Republic of China (PRC) for the Jiangxi Fuzhou Urban Integrated Infrastructure Improvement Project.¹

2. The outputs of the project will be (i) a 12.2-kilometer (km) bus rapid transit (BRT) system, (ii) an urban transport hub at the new Jiangxi Fuzhou Railway Station, (iii) river rehabilitation and “greenway” development, (iv) 10 km of station access roads, and (v) institutional strengthening and capacity building. The proposed project will contribute to inclusive growth and environmentally sustainable development in Jiangxi Fuzhou by improving the efficiency and sustainability of urban transport.

II. THE PROJECT

A. Rationale

3. Sustainably supporting rapid urbanization is a key development challenge for the PRC, where 300 million people are expected to move to cities by 2020. Such mass migration will require a major expansion of second-tier cities such as Jiangxi Fuzhou to relieve pressure on existing urban centers and provide economic opportunities for vast numbers of low-income people now engaged in agriculture. Major investments in urban infrastructure, transport, and related services will be necessary to accommodate development in second-tier cities and support sustainable urbanization and inclusive growth.

4. Fuzhou is a prefectural level city in Jiangxi Province. It has a total population of 3.8 million, of which 1.0 million is urban. The Fuzhou urban district where the project is located has a current population of about 500,000 and is expected to grow to 750,000 by 2020. Economically, Fuzhou lags behind nearby provinces and remains relatively poor. In 2010, per capita disposable income was CNY14,445 ($2,275) in the urban areas and CNY5,848 ($921) in the rural areas which was less than 50% of the national average.

5. The new Xiangpu High-Speed Railway, now under construction, will begin at the provincial capital Nanchang and pass through Fuzhou on the way to central Fujian Province. The current railway service consists of one train in each direction per day and takes over 2 hours to travel the 90 km from Fuzhou to Nanchang. The new railway service will initially run about 50 passenger trains each direction daily, offering Fuzhou a major increase in accessibility. With the opening of the high-speed railway, Fuzhou will be about 30 minutes from Nanchang, which will allow the city to transform itself from a small city dependent on agriculture and related processing into a suburb of Nanchang. Fuzhou will become better connected as well to fast-growing and relatively prosperous cities in the eastern PRC. The opening of the new railway offers a significant opportunity to improve the economy of this region. To realize the opportunity, however, the new station in Fuzhou must be efficiently linked to existing and planned residential and employment areas in the city.

6. The new station is 6 km south of the existing city center and 2 km from the currently developed city area. The new station is planned to become Fuzhou’s southern gateway and to anchor a new development area that will include a major business center, hotels, logistics facilities, and housing for nearly 100,000 people by 2020. Through the proposed project, the

¹ The design and monitoring framework is in Appendix 1.
station and surrounding area will be linked to the existing city with well-designed multimodal transport infrastructure and integrated public transport services. This will reduce transport costs, increase the efficiency and attractiveness of the public transport system, expand travel opportunities and regional accessibility to jobs and services, promote sustainable urbanization and poverty reduction, and encourage a shift to modes of travel with lower and even zero emissions.

7. The project aligns with Asian Development Bank (ADB) assistance to the PRC under the country partnership strategy, strengthening (i) inclusive growth and balanced development by promoting sustainable urbanization and (ii) resource efficiency and environmental sustainability by promoting efficient and sustainable urban transport.2 The focus on public transport and multimodal integration directly supports ADB’s sustainable transport initiative. The project aligns with the priorities of the Ministry of Transport, which is promoting the development of multimodal passenger transport hubs under ongoing ADB policy advisory technical assistance.3 The project was selected to take advantage of the opportunity presented by the impending opening of the new high-speed railway and seizes an early opportunity to establish a model for urban transport and development integration that can be replicated in other cities.

8. This project is ADB’s second to support BRT in the PRC, following the Lanzhou Sustainable Urban Transport Project, and applies lessons learned in developing and implementing that project.4 The Lanzhou Sustainable Urban Transport Project benefitted from the involvement of the Institute for Transportation and Development Policy,5 which helped to build local support and encourage an integrated approach to BRT design, road development, and urban planning. In Fuzhou, ADB again worked with the institute to train local officials in BRT design, implementation, and operations and to help the team prepare the BRT feasibility study. The complexity of BRT system planning, design, and operations demanded that the project include a program of institutional strengthening and capacity building in the municipal bus company and the project management office (PMO). The BRT corridor in Fuzhou will not only serve the new railway station area but also run through the center of the city, where passenger demand is highest and bus service is slowed by heavy mixed traffic on narrow streets. As such, the project is expected to be a model for sustainable transport development in small and medium-sized cities.

B. Impact and Outcome

9. The impact of the project will be an efficient, inclusive, and sustainable urban transport system in Jiangxi Fuzhou. The outcome of the project will be efficient multimodal access to the new main railway station.

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5 In 2011, ADB signed a memorandum of understanding with the Institute for Transportation and Development Policy, a nonprofit, nongovernment organization that promotes the development and implementation of sustainable transport projects, establishing a partnership to promote sustainable transport, identify demonstration projects, and provide technical assistance to cities planning or implementing sustainable transport projects.
C. Outputs

10. The project includes the following five main outputs intended to substantially improve the urban transport system in Fuzhou.

11. **Output 1: Bus rapid transit system.** The BRT corridor will extend 12.2 km from the north of Fuzhou through the central business district to the urban transport hub at the new railway station (output 2). Ten kilometers of the corridor will be created by reconstructing and reconfiguring existing roads, and the remaining 2.2 km will be new roads built under output 4. The BRT corridor will have dedicated center-running bus lanes with a proposed 22 stations on island platforms. The project will include the procurement of 51 BRT buses, which will constitute about a quarter of the municipal bus company’s fleet.

12. **Output 2: Urban transport hub.** The urban transport hub will link the BRT and regular bus systems to the new railway station. The hub will incorporate a station for BRT and local buses with four bus bays; BRT ticketing and support facilities; a bus staging area; parking for cars, motorcycles, and bicycles; and pedestrian walkways linking the BRT station to the railway station. New bus company offices, a control center, and bus storage and maintenance facilities will be constructed adjacent to the bus transfer facility.

13. **Output 3: Fenggang River greenway.** The Fenggang River is a winding waterway on the west side of the Fuzhou urban area. The river is now integrated into the irrigation system for rice cultivation. During the rainy season, farmland on both sides of the river floods. The river runs through the new development area, past the front of the new railway station, to the old city. The river must be improved to ensure that the new development area will not flood. Phase 1 of the Fenggang River Improvement Project has already been completed enabling flood control near the city center and providing within Fuzhou recreation areas, parkland, and a path for nonmotorized vehicles. As part of this project, the Fenggang River improvement will be extended by 4.1 km, passing directly in front of the railway station. This output will enable flood control and provide parks and a continuous nonmotorized transport corridor between the old city and the development area adjacent to the new station.

14. **Output 4: Station access roads.** The road component will develop the transport network to connect the new railway station to BRT (output 1), the urban transport hub (output 2), the Fenggang River greenway (output 3), and major road and bus corridors in the existing urban area. The four road sections under the ADB-financed project are urban trunk roads in the approved master plan for the new development area. Altogether, 10 km of new roads will be constructed and will include utilities, streetscape improvements, pedestrian enhancements, and lanes for nonmotorized vehicles.

15. **Output 5: Institutional strengthening and capacity building.** Capacity development and institutional strengthening will be implemented to ensure that the executing agency and implementing agency have sufficient capacity to manage the project and that the municipal bus company is able to plan, implement, and effectively operate the BRT system. This output will have two parts. The first part will support project management and implementation to ensure that project outputs are delivered on time and within budget in accordance with ADB policies and procedures; develop and maintain the project performance monitoring system; assist with procurement and disbursement; oversee detailed design; and ensure that safeguard measures are implemented, monitored, and reported. The second part will build capacity in traffic management, road safety, and BRT operation and management.
16. **Environmental improvement.** Additional funding is being sought from the Global Environment Facility (GEF) to support measures to maximize the energy efficiency of bus operations on the BRT and feeder services. This will mitigate climate change by reducing greenhouse gas emissions, and provide benefits by improving local air quality and reducing public transport operating costs. In particular, GEF funding will support upgrading BRT buses to advanced compressed natural gas technology; scrapping and replacing old, highly polluting buses on local routes; and training bus drivers in eco-driving and maintenance staff in techniques that reduce fuel consumption.

D. **Investment and Financing Plans**

17. The project is estimated to cost $226.46 million, including $100 million from ADB (Table 1).

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Cost ($ million)</th>
<th>Share of Total Cost (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Base Cost</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Bus rapid transit system</td>
<td>30.62</td>
<td>13.52</td>
</tr>
<tr>
<td>2. Urban transport hub</td>
<td>17.72</td>
<td>7.82</td>
</tr>
<tr>
<td>3. Fenggang River greenway</td>
<td>56.48</td>
<td>24.94</td>
</tr>
<tr>
<td>4. Station access roads</td>
<td>83.99</td>
<td>37.09</td>
</tr>
<tr>
<td>5. Institutional strengthening and capacity building</td>
<td>1.44</td>
<td>0.64</td>
</tr>
<tr>
<td><strong>Subtotal (A)</strong></td>
<td><strong>190.25</strong></td>
<td><strong>84.01</strong></td>
</tr>
<tr>
<td><strong>B. Contingencies</strong></td>
<td><strong>32.91</strong></td>
<td><strong>14.53</strong></td>
</tr>
<tr>
<td><strong>C. Financing Charges During Implementation</strong></td>
<td><strong>3.30</strong></td>
<td><strong>1.46</strong></td>
</tr>
<tr>
<td><strong>Total (A+B+C)</strong></td>
<td><strong>226.46</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

*Includes taxes and duties of $5.66 million, which will be partly financed by the Asian Development Bank (ADB) loan.*

*Physical contingencies are computed at 8%. Price contingencies are computed by year and expenditure type based on cumulative domestic and foreign price inflation assumptions and amount to 9.4% of base cost.*

*Includes interest charges during implementation and commitment charges. Interest on the loan during implementation has been computed at the London interbank offered rate plus a spread of 0.4% and a maturity premium of 0.1%. Commitment charges for the ADB loan are computed at 0.15% on the projected undisbursed loan amount.*

Source: Asian Development Bank estimates.

18. The Government of the PRC requested a loan of $100 million from ADB’s ordinary capital resources to finance 44.16% of the project cost. The loan will have a 25-year term, including a grace period of 5 years; an interest rate determined in accordance with ADB’s London interbank offered rate (LIBOR)-based lending facility; a commitment charge of 0.15% per year; and such terms and conditions as may be set forth in the draft loan and project agreements.  

ADB’s loan will cover civil works, equipment, institutional strengthening and capacity building, financing charges during implementation, and taxes and duties on the expenditures financed by ADB. The Fuzhou Municipal Government (FMG) will provide $126.46 million to finance civil works, resettlement, detailed design, supervision, and contingencies.

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*Interest includes a maturity premium of 0.10%. This is based on the above loan terms and the government’s choice of repayment option and dates.*

*The amount of taxes and duties to be financed in the project has been determined based on the principles that (i) the amount of taxes and duties financed by the ADB loan, which represents 2.6% of the project cost, does not represent an excessive share of the project; (ii) taxes and duties apply only with respect to ADB-financed expenditures; and (iii) the financing of the taxes and duties is material and relevant to the success of the project.*
19. The borrower will be the PRC. The government will make the loan proceeds available to the Jiangxi provincial government, which will re-lend the proceeds to the FMG. The FMG will transfer the loan proceeds and government counterpart funds to the Fuzhou Investment and Development Company (FIDC). The FMG will assume the risk of foreign exchange and interest rate variation for the ADB loan. The government has provided ADB with (i) the reasons for its decision to borrow under ADB’s LIBOR-based lending facility based on these terms and conditions, and (ii) assurance that these choices were its own independent decision and not made based on any communication or advice from ADB. The financing plan is in Table 2.

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount ($ million)</th>
<th>Share of Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Development Bank</td>
<td>100.00</td>
<td>44.16</td>
</tr>
<tr>
<td>Government</td>
<td>126.46</td>
<td>55.84</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>226.46</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Source: Asian Development Bank estimates.

20. The project is expected to receive a $2.75 million grant from the GEF to finance the environmental improvement component. Upon approval of the GEF board, the component will be incorporated into the project as additional financing.

E. Implementation Arrangements

21. The executing agency is the FMG. The implementing agency is the FIDC. Advance contracting and retroactive financing have been approved. The implementation arrangements are summarized in Table 3 and described in detail in the project administration manual.8

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Arrangements</th>
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<tbody>
<tr>
<td>Implementation period</td>
<td>August 2012–December 2017</td>
</tr>
<tr>
<td>Estimated completion date</td>
<td>31 December 2017</td>
</tr>
<tr>
<td>Management</td>
<td></td>
</tr>
<tr>
<td>(i) Oversight body</td>
<td>Fuzhou Municipal Project Leading Group</td>
</tr>
<tr>
<td>(i)</td>
<td>Vice-Mayor, Fuzhou Municipal Government (chair)</td>
</tr>
<tr>
<td>(i)</td>
<td>Heads of all municipal agencies concerned (members)</td>
</tr>
<tr>
<td>(ii) Executing agency</td>
<td>Fuzhou Municipal Government</td>
</tr>
<tr>
<td>(iii) Implementing agency</td>
<td>Fuzhou Investment and Development Company</td>
</tr>
<tr>
<td>Procurement</td>
<td>International competitive bidding</td>
</tr>
<tr>
<td></td>
<td>6 contracts $36.52 million</td>
</tr>
<tr>
<td></td>
<td>National competitive bidding</td>
</tr>
<tr>
<td></td>
<td>10 contracts $75.37 million</td>
</tr>
<tr>
<td>Consulting services</td>
<td>Various</td>
</tr>
<tr>
<td></td>
<td>102 person-months $1.44 million</td>
</tr>
<tr>
<td>Retroactive financing and/or advance contracting</td>
<td>ADB has approved advance contracting and retroactive financing for road contracts and consulting services incurred no earlier than 12 months before signing of the Loan Agreement. The amount to be retroactively financed will not exceed 20% of the loan amount.</td>
</tr>
<tr>
<td>Disbursement</td>
<td>The loan proceeds will be disbursed in accordance with ADB’s Loan Disbursement Handbook (2012, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.</td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank.

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8 Project Administration Manual (accessible from the list of linked documents in Appendix 2).
III. DUE DILIGENCE

A. Technical

22. The (i) BRT system, (ii) urban transport (multimodal) hub, (iii) Fenggang River greenway, and (iv) four station access roads are technically viable with technology choices based on efficient and proven designs. The component for institutional strengthening and capacity building will assist and advise the FMG during detailed design and implementation. The capacity of the FMG is considered adequate to implement the project’s advanced technical and sustainable transport aspects, based on its performance on past and ongoing urban transport development projects.\(^9\)

B. Economic and Financial

23. The project is economically viable, with an estimated economic internal rate of return of 14.0% and net present value of CNY132.69 million at a 12.0% discount rate. The estimate covered the three transportation-related outputs for which quantitative economic benefits could be estimated (excluding the Fenggang River greenway and institutional strengthening and capacity building). The estimated costs include investment in civil works and equipment, land acquisition and resettlement, and operation and maintenance. The estimated benefits include savings in vehicle operating cost and travel time. Sensitivity analysis of potential cost overruns and benefit reductions demonstrates that the project’s economic viability is robust. Other benefits that could not be quantified include reduced costs of flooding, additional land to be made available for urban development, improved air quality, and better quality of life.

24. The project has both revenue-generating and nonrevenue components. The nonrevenue components include road network improvements, the urban transport hub, and the Fenggang River greenway. The BRT component will generate revenue by collecting bus fares and advertising fees. The financial internal rate of return for the BRT component was estimated to be 7.5% before corporate income tax and 5.2% after tax. As the financial internal rate of return after tax is higher than the 2.2% weighted average cost of capital, the BRT component is considered financially viable.

C. Governance

25. All procurement to be financed under the ADB loan will be carried out in accordance with ADB Procurement Guidelines (2010, as amended from time to time). The relevant sections of ADB’s Anticorruption Policy (1998, as amended to date) will be included in all procurement documents and contracts. ADB’s Anticorruption Policy was explained to and discussed with the government, the executing and implementing agencies, and the PMO. Specific policy requirements and supplementary measures are described in the project administration manual (footnote 8). An assessment of financial management capacity indicates that the implementing and executing agencies carefully follow PRC policies and procedures for accounting and financial management. The implementing agency has strong accounting and financial management capacity, as well as experience managing multiple large construction projects.

\(^9\) Project Technical Description (accessible from the list of linked documents in Appendix 2).
D. Poverty and Social

26. A poverty and social assessment was conducted during project preparation. The project will benefit a population of over 450,000, of which 65% is urban. Per capita income remains low in both rural and urban areas of Jiangxi Province. In Fuzhou, per capita gross domestic product is only 48% of the national average, and 6% of the people in the project area are poor—78% of the poor living in rural areas and 22% urban. The rural population increasingly depends on nonfarm activities for livelihoods. Better economic and employment opportunities, training to enhance skills, and social security programs are the main needs of the poor and vulnerable.

27. An integrated urban transport system will improve mobility and enhance accessibility to employment for all residents. It will contribute to inclusive and balanced development, facilitate urbanization, and reduce income disparity. Poor and lower-income residents rely on public and nonmotorized transport, which will receive the majority of the project investment. The project is designed to meet the transport requirements of the rapidly growing urban areas of Fuzhou and will contribute to strengthening industrial growth and generating economic and employment opportunities for the local population. Project-affected people will be provided training and skills enhancement programs to help them gain employment in emerging industry. Vulnerable groups affected by the project will receive special assistance. The project will facilitate the creation of a sustainable integrated public transport system for Fuzhou, including road safety measures. A social development action plan has been prepared to ensure that local people are protected from construction disturbances and health risks like HIV/AIDS.

28. Women have particular transport needs arising from their various social roles and patterns of mobility. Women’s responsibilities often combine farm work and/or urban employment with travel to markets or taking children to and from school. Women are more likely than men to have personal safety concerns when using public transport. These considerations have important implications for the physical design and operation of public transport systems. To maximize positive gender impacts, the project is designed to meet ADB’s effective gender mainstreaming categorization. A project gender action plan has been prepared with a focus on (i) ensuring women’s equitable participation in public consultation regarding the project, (ii) incorporating gender-responsive features in the design of urban transport infrastructure that will benefit all vulnerable users, and (iii) promoting increased employment opportunities for women and building institutional capacity for gender mainstreaming. The implementation of the gender action plan will be financed through the project budget.

E. Safeguards

29. Environment. The project is category A for environment. An environmental impact assessment was prepared and disclosed in compliance with ADB’s Safeguard Policy Statement (2009). The introduction of BRT and support for replacing and upgrading of the current bus fleet with compressed natural gas technology will provide cleaner and more environmentally sustainable travel options. The Fenggang River greenway will reduce the flood risk while creating a new urban park and will encourage a shift to nonmotorized transport. Project development will occupy an area that is principally agricultural and residential land, scattered woodland, and habitats along the Fenggang River. These habitats are modified and do not have significant biodiversity value but will be compensated for with the creation of habitats and features of value for biodiversity in the design of the park and river-improvement works.

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10 Gender Action Plan (accessible from the list of linked documents in Appendix 2).
11 Environmental Impact Assessment (accessible from the list of linked documents in Appendix 2).
Fenggang River improvement will have short-term, localized adverse impacts on hydrology, water quality, and biodiversity but is expected to offer medium- to long-term benefits by reducing flood risk and creating a new urban amenity. No cultural relics or historical sites are affected by the project. The project will contribute to cumulative urban development effects on ambient air quality and noise levels, greenhouse gas emissions, and pressures on resources and services.

30. An environmental management plan has been prepared and sufficient funds (3% of the project cost) allocated for its implementation. This budget includes support for detailed design, capacity building, and independent monitoring. Assuming the effective implementation of mitigation measures and monitoring requirements as per the environment management plan, the project is unlikely to have significant adverse environmental impacts but will offer a number of benefits. Two rounds of public consultation and a community survey were undertaken. A grievance-redress mechanism has been established to address any issues and complaints that may arise.

31. **Resettlement.** The project is category A for involuntary resettlement. It will acquire 216.57 hectares of land, including 153.10 hectares of farmland. Land acquisition and resettlement will affect 7,461 people in 1,843 households, including 2,450 people in 569 households affected by house demolition and relocation. The project does not require any temporary acquisition of land. The project will significantly affect 5,550 people with physical displacement or the loss of more than 10% of their land and other productive assets.

32. The cost of land acquisition and resettlement is CNY418.22 million, which includes land compensation, housing relocation, and livelihood support, as well as various taxes, fees, and contingency funding. The executing agency has assured ADB that adequate counterpart funding will be made available for land acquisition and resettlement, in line with the annual funding requirements stipulated in the resettlement plan. Resettlement implementation will be monitored both internally and externally. A resettlement consultant will be engaged to aid and guide the executing agency in effectively implementing the resettlement plan. The PMO’s land acquisition and resettlement unit will coordinate internal supervision and reporting of plan implementation with relevant local government agencies. The executing agency will engage an external institute for semiannual monitoring and reporting. Public consultations were undertaken at project preparation and will continue throughout the project cycle as per the public consultation schedule prepared under the resettlement plan. A grievance-redress mechanism has been established to address affected people’s concerns.

33. **Indigenous peoples.** The project is category C for indigenous peoples. Han Chinese, the PRC’s majority ethnic group, are 99% of Jiangxi Province’s population.

F. **Risks and Mitigating Measures**

34. The project is formulated to minimize potential risk. The FMG and FIDC have successfully carried out many large infrastructure projects and have substantial experience in project implementation and management but no experience with ADB-financed projects. To address the lack of experience with ADB procedures, training on ADB safeguards and project procurement and monitoring procedures has been provided during project preparatory technical assistance. In addition, an estimated 102 person-months of consulting services will further

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12 Resettlement Plan (accessible from the list of linked documents in Appendix 2).

help the executing and implementing agencies and project implementation units to strengthen project management and implementation and their institutional capacity. Strong support for the project from the governments of the PRC and Jiangxi Province, thorough project preparation, and approval of advance procurement all contribute to reducing the risk of implementation delay. Major risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.14

Table 4: Summary of Risks and Mitigating Measures

<table>
<thead>
<tr>
<th>Risks</th>
<th>Mitigating Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay in implementation</td>
<td>As the executing and implementing agencies are new to ADB procurement guidelines, disbursement procedures, and safeguards requirements; a qualified procurement company has been selected, and international and national procurement specialists will be recruited, to support initial project implementation. Additional consulting support and on-the-job training will be provided to staff of the executing and implementing agencies to ensure adherence to ADB policies and procedures and to minimize the risk of delays.</td>
</tr>
<tr>
<td>Weak project coordination between the project management office, executing agency, and implementing agency</td>
<td>The risk will be mitigated through the project-leading group, led by the vice mayor in charge of the project, which will coordinate various agencies and resolve conflicts.</td>
</tr>
<tr>
<td>The executing and implementing agencies have no prior experience with ADB safeguards policies.</td>
<td>Specific clauses on safeguards management will be included in the civil works and supervision contracts. The executing agency will hire independent monitors for resettlement and environment safeguard compliance. ADB supervision missions will include safeguards specialists. The project includes consulting support to build capacity for environmental, resettlement, and gender monitoring.</td>
</tr>
<tr>
<td>Price escalation affecting construction materials or other costs increasing total project costs</td>
<td>Changes in the prices of construction materials prior to implementation were monitored as part of technical assistance, and substantial price and physical contingencies are provided to cover cost overruns. The Fuzhou Municipal Government will be responsible for financing all cost overruns.</td>
</tr>
<tr>
<td>Financial and management risks</td>
<td>The government, executing agency, and implementing agency shall ensure the timely release of counterpart funds as per loan covenants. The internal auditing, monitoring, and evaluation units of the executing and implementing agencies will provide internal control. An external auditor acceptable to ADB shall conduct an annual audit of the project accounts in accordance with international auditing standards and submit it to ADB. The project will provide consulting services to assist in establishing finance and management systems and controls, as well as help to ensure that ADB’s reporting and monitoring requirements are met.</td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank.

IV. ASSURANCES AND CONDITIONS

35. The government and FMG have assured ADB that implementation of the project shall conform to all applicable ADB policies including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the project administration manual and loan documents.

14 Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).
36. The government and FMG have agreed with ADB on certain covenants for the project, which are set forth in the loan agreement and project agreement.

V. RECOMMENDATION

37. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of $100,000,000 to the People’s Republic of China for the Jiangxi Fuzhou Urban Integrated Infrastructure Improvement Project, from ADB’s ordinary capital resources, with interest to be determined in accordance with ADB’s London interbank offered rate (LIBOR)-based lending facility; for a term of 25 years, including a grace period of 5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements presented to the Board.

Haruhiko Kuroda
President

19 September 2012
# DESIGN AND MONITORING FRAMEWORK

<table>
<thead>
<tr>
<th>Design Summary</th>
<th>Performance Targets and Indicators with Baselines</th>
<th>Data Sources and Reporting Mechanisms</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
</table>
| Impact | An efficient, inclusive, and sustainable urban transport system in Jiangxi Fuzhou | Share of person-trips by public transport increased from 9.1% in 2011 to 18% in 2020 | **Assumptions**<br>The Fuzhou Urban Master Plan, 2008–2020 implemented  
Strong government commitment to promoting the public transport system  
Bus services increase with population and economic growth  
Railway and main station construction completed on time |
|  | Percentage of railway passengers using BRT 30% by 2020 (2011 baseline: 0) | **Assumptions**<br>The Fuzhou Urban Master Plan, 2008–2020 implemented  
Strong government commitment to promoting the public transport system  
Bus services increase with population and economic growth  
Railway and main station construction completed on time |
|  | Average concentrations of carbon monoxide and nitrogen dioxide in Fuzhou staying at current levels until 2020* | **Assumptions**<br>The Fuzhou Urban Master Plan, 2008–2020 implemented  
Strong government commitment to promoting the public transport system  
Bus services increase with population and economic growth  
Railway and main station construction completed on time |
| Outcome | Efficient multimodal access to the new main railway station | Average bus speeds on BRT corridor increased to 26 km/hour by 2018 from 11 km/hour in 2012 | **Assumption**<br>Railway having adequate capacity for both freight and passenger services  
**Risks**<br>Delay in constructing the long-distance bus terminal and the provision of long-distance bus services  
Implementation delays in the operation of the new railway |
|  | Average age of the bus fleet reduced from 8 to 6 years in 2018 | **Assumption**<br>Railway having adequate capacity for both freight and passenger services  
**Risks**<br>Delay in constructing the long-distance bus terminal and the provision of long-distance bus services  
Implementation delays in the operation of the new railway |
|  | Transfer time between BRT bus terminal and railway station platform less than 10 minutes by 2018 | **Assumption**<br>Railway having adequate capacity for both freight and passenger services  
**Risks**<br>Delay in constructing the long-distance bus terminal and the provision of long-distance bus services  
Implementation delays in the operation of the new railway |
|  | Flood frequency reduced from annual to once in 20 years | **Assumption**<br>Railway having adequate capacity for both freight and passenger services  
**Risks**<br>Delay in constructing the long-distance bus terminal and the provision of long-distance bus services  
Implementation delays in the operation of the new railway |
| Outputs | 1. BRT system | 12.2 km BRT system operating by 2015 | **Assumption**<br>Timely provision of counterpart funds  
**Risk**<br>Timely provision of counterpart funds |
|  | Lighting, security cameras, and help buttons installed in all BRT stations and vehicles to ensure the safety of women and other vulnerable users | **Assumption**<br>Timely provision of counterpart funds  
**Risk**<br>Timely provision of counterpart funds |
|  | Priority seating for people with special needs (pregnant women, parents with young children in prams, the elderly, people with disabilities) in all BRT buses and stations | **Assumption**<br>Timely provision of counterpart funds  
**Risk**<br>Timely provision of counterpart funds |
|  | New bus and taxi terminals and support facilities constructed by 2014 | **Assumption**<br>Timely provision of counterpart funds  
**Risk**<br>Timely provision of counterpart funds |
|  | Lighting, security cameras, and help buttons installed in bus terminal to ensure the safety of women and other vulnerable users | **Assumption**<br>Timely provision of counterpart funds  
**Risk**<br>Timely provision of counterpart funds |
|  | Priority seating for people with special needs (pregnant women, parents with young children in prams, the elderly, people with disabilities) in all BRT buses and stations | **Assumption**<br>Timely provision of counterpart funds  
**Risk**<br>Timely provision of counterpart funds |
|  | 4 km greenway and embankment constructed by 2015 | **Assumption**<br>Timely provision of counterpart funds  
**Risk**<br>Timely provision of counterpart funds |
|  | Landscaping and other park facilities constructed by 2016 | **Assumption**<br>Timely provision of counterpart funds  
**Risk**<br>Timely provision of counterpart funds |
## Design Summary

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<th>Data Sources and Reporting Mechanisms</th>
<th>Assumptions and Risks</th>
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<tbody>
<tr>
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<td>Project progress reports</td>
<td></td>
</tr>
<tr>
<td>5. Institutional strengthening and capacity building</td>
<td>Project progress reports</td>
<td></td>
</tr>
<tr>
<td>50% of the greenery maintenance and landscaping jobs filled by women</td>
<td>Project progress reports</td>
<td></td>
</tr>
<tr>
<td>10 km of urban class 2 roads and related infrastructure constructed by 2015</td>
<td>Project progress reports</td>
<td></td>
</tr>
<tr>
<td>Staff of executing and implementing agencies and PMO trained on project management, PPMS, procurement, disbursement, safeguards, and gender requirements</td>
<td>Project progress reports</td>
<td></td>
</tr>
<tr>
<td>Agencies in Fuzhou trained on traffic management, road safety, and BRT operation and management</td>
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<td></td>
</tr>
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<td>Project progress reports</td>
<td></td>
</tr>
</tbody>
</table>

## Activities with Milestones

### 1. BRT system
1. Construct BRT route, station, terminal, and parking area by June 2014.
2. Implement BRT traffic engineering work by June 2014.
3. Install BRT station ticketing system and operation system by December 2014.
4. Purchase BRT buses and put them in operation by December 2015.
5. Purchase bus maintenance equipment by December 2015.

### 2. Urban transport hub
2. Construct bus company offices and bus and BRT terminal by June 2015.

### 3. Fenggang River greenway
2. Landscape section 1 by December 2016.
3. Landscape section 2 by December 2017.

### 4. Station access roads
2. Construct Zhanqian road by December 2014.

### 5. Institutional strengthening and capacity building
1. Recruit international consulting firm by June 2013.
2. Train executing and implementing agencies and PMO on project management, PPMS, procurement, disbursement, safeguards, and gender requirements by December 2013.
3. Train agencies in Fuzhou on traffic management, road safety, and BRT operation and management by December 2015.
4. Train BRT bus drivers and conductors on women’s safety needs by December 2015.
5. Supervise the implementation of the resettlement plan, environment management plan, gender action plan, and social development action plan from 2012 to 2016.

## Inputs

### ADB: $100 million

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil works</td>
<td>86.12</td>
</tr>
<tr>
<td>Equipment</td>
<td>9.14</td>
</tr>
<tr>
<td>Institutional strengthening and capacity building</td>
<td>1.44</td>
</tr>
<tr>
<td>Interest during construction</td>
<td>3.30</td>
</tr>
</tbody>
</table>

### Government: $126.46 million

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil works</td>
<td>15.97</td>
</tr>
<tr>
<td>Land acquisition and resettlement</td>
<td>66.39</td>
</tr>
<tr>
<td>Project design, management, and supervision</td>
<td>11.19</td>
</tr>
<tr>
<td>Contingencies</td>
<td>32.91</td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank, BRT = bus rapid transit, km = kilometer, PMO = project management office, PPMS = project performance monitoring system.

a Baseline levels will be recorded during loan inception mission.

LIST OF LINKED DOCUMENTS
http://www.adb.org/Documents/RRPs/?id=44007-013-3

1. Loan Agreement
2. Project Agreement
3. Sector Assessment (Summary): Transport, and Information and Communication Technology
4. Project Administration Manual
5. Contribution to the ADB Results Framework
6. Development Coordination
7. Financial Analysis
8. Economic Analysis
9. Country Economic Indicators
10. Summary Poverty Reduction and Social Strategy
11. Gender Action Plan
12. Environmental Impact Assessment
13. Resettlement Plan
14. Risk Assessment and Risk Management Plan

Supplementary Documents
15. Project Technical Description
16. Summary Travel Demand Forecasts
17. Summary of Global Environment Facility Proposal