Report Number: ICRR11091



| 1. Project Data:    | Data: Date Posted: 08/07/2001  |                          |            |            |  |  |
|---------------------|--|--------------------------|------------|------------|--|--|
| PROJ ID: P003565    |  |                          | Appraisal  | Actual     |  |  |
| Project Nan         | ne: Shanghai Metropolitan<br>Transport Project   | Project Costs<br>(US\$M) | 148.2      | 151.54     |  |  |
| Count               | ry: China  | Loan/Credit (US\$M)      | 60         | 61.27      |  |  |
| Sector              | (s): Board: TR - Roads and<br>highways (88%),<br>Sub-national government<br>administration (12%) | Cofinancing<br>(US\$M)   |            |            |  |  |
| L/C Numb            | er: C2296  |                          |            |            |  |  |
|                     |  | Board Approval<br>(FY)   |            | 92         |  |  |
| Partners involved : |  | Closing Date             | 06/30/1998 | 06/30/1999 |  |  |
|                     |  |                          |            |            |  |  |
| Prepared by:        | Reviewed by:   | Group Manager:           | Group:     |            |  |  |
| Binyam Reja         | Madhur Gautam  | Alain A. Barbu           | OEDST      |            |  |  |

#### 2. Project Objectives and Components

#### a. Objectives

The principal objective of the project was to provide the basis for developing an efficient urban transport system in Shanghai Metropolitan Region (SMR) by:

- Increasing capacity, reducing congestion and improving efficiency in the Shanghai urban transport network;
- Improving the planning, programming, financing, and management of the urban transport system in Shanghai.

## b. Components

To achieve the above objectives, the project comprised the following components :

- Construction of Inner Ring Road Stage 1
- Traffic Safety and Management
- Technical assistance to strengthen municipalities capabilities in planning and implementing transportation measures to improve traffic management and safety and bus operations.

# c. Comments on Project Cost, Financing and Dates

Note on the ICR and Evaluation Summary (ES): The project was the first of two metropolitan transport projects providing assistance to the Shanghai Municipal Government (SMG) with similar objectives and design, overlapping implementation periods and the same implementing agency. The second project is the Second Shanghai Metropolitan Transport Project (SMTP II: IDP003622). Given their similarities, the Region made a combined assessment of the two projects, but issued two separate reports, containing essentially the same text except for sections 1 and 2 and Annexes 2,4,5 and 6. The ES follows the same format: Sections 3, 4, 5, 7, 8, 9 of the ES are the same for both projects, but sections 1, 2 and 6 are different.

The SMTP I was approved on September 10, 1991 and closed on June 30, 1999, one year later than originally scheduled. The SMTP II was approved on October 14, 1993 and closed on December 31, 2000, two years later than scheduled.

## 3. Achievement of Relevant Objectives:

#### Physical Objectives:

- Additional physical capacity to Shanghai's urban transport network was added by the construction of the
  elevated ring road and the associated improvements to the ground level roads, all of which have increased the
  physical capacity of the road system by up to 90,000 vehicles/day on the most heavily used sections.
- The physical targets set out at appraisal for both SMTP I and II were met. A total of 29 km elevated roads and associated ground roads, 41 ramps, and 4 interchanges were completed as planned.
- The overall congestion along the ring road corridor and Central Business District in Puxi was initially reduced, but it has now re-emerged at peak times on some sections and ramps of the ring road. The design capacity of the ring road has been exceeded, with the actual traffic flow in 2000 being doubled than predicted at appraisal in 1991.
- The ex-post ERR for both the SMTP I and II was estimated at 27.6% versus 18% and 15% respectively for

SMTP I and II.

#### Traffic Management and Safety Objectives :

- Traffic management schemes improved marginally the practical capacity of the existing roads. A number of transport management schemes were dropped, and the implementing agencies put less "ownership" on this component than they did on the inner ring road construction component.
- Progress was made in changing the agencies' attitude towards traffic system management and its role in enhancing the efficiency of the urban transport system. But there continues to be limited awareness on traffic demand management, starting with parking.

### Institutional Development Objectives:

- The objective to improve transport planning was fully achieved. The Shanghai City Comprehensive Transport Planning Institute (SCCTPI) received technical assistance, and its capacity has substantially improved.
- The objectives to improve the programming of works and cost recovery, however, were not achieved as envisaged during appraisal.
- The technical assistance and training program was successfully carried out.

Public Transport Improvement Objectives: The objective to improve the public transport sector through reform was substantially achieved.

- The Shanghai Public Transport Company (SPTC) was reorganized into an umbrella company, the Shanghai Public Transport General Company (SPTGC) and 13 operating companies, all of which were to be financially and operationally independent.
- Routes are awarded through competitive bidding among the 13 operating companies and other eligible public transport companies.
- The Public Transport Management Office was created to regulate the public transport sector and to manage the tending process.
- Operating subsidies were gradually eliminated
- The number of buses and route length increased by 250%
- Two bus depots and one interchange were completed.

**Non-Motor Vehicle Program:** Two-way NMV only routes were established, but their performance is less than satisfactory due to lack of lane discipline, lack of respect for traffic signals at junctions, and uncontrolled parking of vehicles. Lack of channelization is also a major problem.

**Vehicular Air Quality Management Objective** was successful. Unleaded fuel was introduced in 1997, and emissions standards for new light duty vehicles were also introduced, all ahead of national standards.

#### 4. Significant Outcomes/Impacts:

The significant outcome of the project is the construction of the Inner Ring Road, which has increased the capacity of Shanghai's urban transport network and improved its efficiency in support of the metropolis' economic development goals.

# 5. Significant Shortcomings (including non-compliance with safeguard policies):

The implementation of traffic management schemes proved complex. The lack of a comprehensive traffic demand management is likely to decrease the benefits of the physical investments.

| 6. Ratings:          | ICR           | OED Review   | Reason for Disagreement /Comments   |
|----------------------|---------------|--------------|---|
| Outcome:             | Satisfactory  | Satisfactory |   |
| Institutional Dev .: | High          |              | Programming and cost-recovery objectives were not fully achieved.   |
| Sustainability :     | Highly Likely |              | The increase in congestion is likely to reduce some of the time saving benefits accrued from the project. |
| Bank Performance :   | Satisfactory  | Satisfactory |   |
| Borrower Perf .:     | Satisfactory  | Satisfactory |   |
| Quality of ICR:      |               | Satisfactory |   |

NOTE: ICR rating values flagged with '\*' don't comply with OP/BP 13.55, but are listed for completeness.

#### 7. Lessons of Broad Applicability:

The ICR identifies many lessons, and the following are repeated here:

- Road design capacity can be surpassed if the appraisal traffic projects are too conservative.
- There is a need to integrate the institutions dealing with traffic management.

• Pace of reform for public transport is governed by local agencies and national political conditions .

# 8. Assessment Recommended? Yes No

Why? The project, together with SMTP II, may be audited to learn more from urban transport assistance in the context of a rapidly growing and liberalizing economy.

# 9. Comments on Quality of ICR:

The ICRs for both SMTP I and II are satisfactory. The section on lessons learned could have been condensed more and made sharper.