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Report No. 12214-KZ

STAFF APPRAISAL REPORT

REPUBLIC OF KAZAKHSTAN

URBAN TRANSPORT PROJECT

MARCH 2, 1994

MICROGRAPHS

Report No. 12214 KZ
Type: SAR

**Infrastructure, Energy and Environment Division
Country Department III
Europe and Central Asia Region**

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CURRENCY EQUIVALENTS

Currency Unit before November 1993 = Ruble

Currency Unit as of November 1993 = Tenge

per US\$

June 1992	100 Rubles
March 1993	685 Rubles
October 1993	2,500 Rubles
December 1993	4.7 Tenge

WEIGHTS AND MEASURES

Metric System

ACRONYMS AND ABBREVIATIONS

FSU	-	former Soviet Union
GDP	-	gross domestic product
IBRD	-	International Bank for Reconstruction and Development
ICB	-	international competitive bidding
IS	-	international shopping
MOE	-	Ministry of Economy
MOT	-	Ministry of Transport
NBRK	-	National Bank for Republic of Kazakhstan
NIAT	-	National Institute of Automobile Transport
PCR	-	Project Completion Report
PIU	-	Project Implementation Unit
PPAR	-	Project Performance Audit Report
PSAP	-	Policy Statement and Action Plan for Improving Public Transport Services in Almaty, Karaganda, and Shimkent
SOE	-	Statement of Expenditures
TA	-	Technical Assistance
TOR	-	Terms of Reference
UTP	-	Urban Transport Project

BORROWER'S FISCAL YEAR

January 1 to December 31

STAFF APPRAISAL REPORT
REPUBLIC OF KAZAKHSTAN
URBAN TRANSPORT PROJECT

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Map: IBRD No. 23700R1

This report is based on the findings of an appraisal mission in June/July 1993. The report was prepared by Jean-Charles Crochet (EC3IV-Task Manager) and Jim Newman (consultant) with contributions by Hartford Buckel, Jean-Pierre Charrier, William Krause, Francoise Meymerie, Djelloul Oublebsir (consultants), Melody Mason (EC3IV), and Richard Podolske (EC3MO). The peer reviewers are John Flora (TWUTD) and Richard Scurfield (SA2IN). The Department Director and Division Chief are Russell J. Cheetham and Jonathan C. Brown respectively.

STAFF APPRAISAL REPORT

REPUBLIC OF KAZAKHSTAN **URBAN TRANSPORT PROJECT**

Loan and Project Summary

- BORROWER:** Republic of Kazakhstan
- BENEFICIARIES:** The central Government of Kazakhstan and the local governments and public transport companies of the cities of Almaty, Karaganda, and Shimkent
- AMOUNT:** US\$40 million equivalent
- TERMS:** 17 years, including 5 years of grace period, at the World Bank's standard variable interest rate
- PROJECT OBJECTIVES:** The main objectives of the project are to (i) help restore public transport capacity in Kazakhstan's three main cities to adequate levels of service quality; and (ii) design and implement some key improvements in policies and institutions in the urban public transport sector of the three cities. The policy improvements and related implementation measures are spelled out in a Policy Statement and Action Plan for Improving Public Transport Services (PSAP) in Almaty, Karaganda, and Shimkent which has been formally issued by the Government.
- PROJECT DESCRIPTION:** The project includes the following components:
- (a) Provision of about 300 new standard urban buses;
 - (b) Rehabilitation of about 550 existing buses and 400 existing trolleybuses including provision of necessary spare parts and supplies;
 - (c) Provision of a limited quantity of workshop and office equipment; and
 - (d) Provision of training and technical assistance.
- PROJECT BENEFITS:** The project will contribute to alleviating the shortage in public transport capacity for Almaty, Karaganda, and Shimkent. Thus, it will increase the quality of public transport services, and reduce

bus transport time and canceled trips for the 90% of the three cities' populations dependent on public transport for city travel. The improved service will have indirectly benefit labor mobility and the functioning of markets. The project will also help put in place better urban transport policies and improve the performance of the public transport companies. In addition, the project will have a positive impact on the environment.

PROJECT RISKS:

There are two main project risks: (i) delays in project execution; and (ii) incomplete implementation of the PSAP. The project has been designed and project preparation has been carried out so as to reduce these risks as much as possible. Procurement will be carried out with the assistance and monitoring of a central unit which will be given adequate staff and special Government support. Preparation of procurement documents has already started for buses and an evaluation of spare part needs has been completed. The PSAP, which has been approved by the central and local governments, is simple and focuses in general on policies for which there is already a broad consensus. The project includes support for the formulation and implementation of the detailed actions included in the PSAP. Implementation of the PSAP will be closely supervised during project execution.

**ESTIMATED COSTS:
(US\$ million)**

	Local	Foreign	Total
Provision of about 300 new buses	0.5	28.0	28.5
Rehabilitation of existing buses and trolleybuses	0.7	8.3	9.0
Training and Technical Assistance	0.6	2.2	2.8
Equipment		0.3	0.3
Base Cost	1.8	38.8	40.6
Price Contingencies	0.1	1.7	1.8
Total Cost	1.9	40.5	42.4

**FINANCING PLAN:
(US\$ million)**

	Local	Foreign	Total
Government/Public Transport Companies	1.3	0.5	1.8
European Community	0.1	0.5	0.6
IBRD	0.5	39.5	40.0
Total Financing	1.9	40.5	42.4

**ESTIMATED IBRD DISBURSEMENTS:
(US\$ million)**

World Bank Fiscal Year	FY95	FY96	FY97
Annual	24.5	15.1	0.4
Cumulative	24.5	39.6	40.0

ECONOMIC RATE OF RETURN: High but not quantifiable with available data.

POVERTY CATEGORY: Not applicable.

MAP: IBRD No. 23700R1

REPUBLIC OF KAZAKHSTAN

URBAN TRANSPORT PROJECT

I. COUNTRY AND ECONOMIC BACKGROUND

A. General Features

1.1 Kazakhstan is among the largest and potentially wealthiest countries of the former Soviet Union (FSU). It has extensive and relatively unexploited mineral resources including gold, iron ore, copper, zinc, coal, gas, and oil. It also has vast agricultural lands with significant production of grain, cotton, and cattle, and is self-sufficient in food. Production and trade have been mostly directed towards mineral extraction and large-scale agriculture. This country, of only about 17 million people, has been one of the main suppliers of raw materials to the FSU.

1.2 Kazakhstan has a relatively extensive infrastructure and a highly educated work force, an inheritance from the significant FSU investment of the past decades. Social indicators are comparable with upper middle income countries. Labor skills have been developed through on-the-job training in the space industry, defense, and manufacturing. In the future, they could provide the basis for the development of skilled labor-based industries.

1.3 The FSU has left a legacy of constraints. The economy is highly integrated with that of other FSU countries and production units are highly specialized. The economy also lacks the flexibility inherent to a market system. Infrastructure is largely directed toward Russia, at the expense of Kazakhstan's potential trade orientation toward Asia and the Middle East. Even domestically, infrastructure has been designed for the wider FSU: oil fields in the west are not linked to refineries in the east; northern and southern electricity grids are not connected. Kazakhstan has also inherited extensive environmental problems: damage of pastoral lands through excessive water use and fertilization; contamination resulting from nuclear testing; and severe pollution stemming from mining and industry.

B. Recent Developments

1.4 Serious macroeconomic difficulties have developed in the past few years. Real output is estimated to have fallen by a cumulative 30% over 1990-92 and a further 11% in 1993. Trade and payments disruptions, the extreme integration of FSU production, and the elimination of state orders have contributed to the decline. In 1992, the contraction was compounded by a loss of about 8% of gross domestic product (GDP) in fiscal transfers from the FSU. However, a strong post-drought rebound in agricultural production and large trade credits from Russia in the third quarter prevented a sharper decline.

1.5 The country's decision to stay in the ruble zone ensured the continued supply of credit from Russia during 1992. While ruble credits were necessary to support domestic activity in the absence of foreign financing, the lack of overall monetary discipline within the zone fueled a rapid rise in inflation. Consumer prices in the country rose by 25 times in 1992 and a further

20 times in 1993. Personal incomes fell drastically. Social pressures brought about by the deterioration in living conditions led the Government to relax its strict cash management system: the consolidated budget turned from being balanced during the first half of the year to a deficit of about 7% of GDP for 1992 as a whole. However, the situation improved during 1993 when the budget deficit decreased to about 3% of GDP.

1.6 Despite such considerable macroeconomic difficulties, the Government has steadily pursued structural reforms. Prices of most goods were liberalized in January 1992. As in most FSU countries, some prices continued to be administered for social reasons. However, the Government has continuously reduced the number of goods subject to price control. Prices of important goods that still remain controlled in other FSU countries, like meat and milk, were liberalized in January 1993 and only a few basic goods remain under administered prices. Moreover, most administered prices have been substantially adjusted. For example, rents of state owned property were increased tenfold in early 1993 and public transport fares in Almaty have been increased by a factor of 33 in 1992.

1.7 There has also been rapid progress on privatization and enterprise reform. Early in 1993 the President approved a World Bank-supported program for such reforms. Most of the 30 texts and decrees needed to support implementation of the enabling legislation were approved by Parliament in April 1993. They included amendments to the old privatization law and to the joint stock company law. As a result, about 10% of state assets were privatized by the end of 1993.

1.8 The development of the private sector is being encouraged through the adoption of extensive legal reforms and institutional building. The new Constitution was adopted in January 1993 and establishes the legal basis for private ownership, which was not recognized under the previous system. Other legislation has been enacted concerning companies, pledges, leases, bankruptcy and land reform.

1.9 Most legal and institutional barriers to private participation in trade and distribution have been removed. The system of compulsory state orders governing the distribution of production was abolished in December 1992. The number of goods covered by inter-republican trade arrangements, export licenses and quotas were substantially reduced for 1993. There are no import quotas and import duties range from 0 to 13%. Kazakhstan introduced its own national currency - the Tenge - in November of 1993 and adopted a macroeconomic stabilization program to support it.

1.10 Within the FSU, Kazakhstan has been in the forefront of opening its economy to external direct foreign investment. An agreement was finalized with Chevron to develop Kazakhstan's Tenghiz oil field in April 1993. Tenghiz ranks alongside some of the largest fields in Saudi Arabia, with recoverable reserves estimated at six to nine billion barrels of oil. Initial investment for this project is estimated at around US\$1.5 billion. In June 1992, British Gas and Agip won exclusive negotiating rights to develop the Karachanganak field with 20 trillion cubic feet of gas and two billion barrels of oil and condensate. If negotiations are concluded successfully, this agreement would involve investment of similar importance to that by Chevron. Other foreign investors are exploring the potential development of an oil export pipeline which would connect

Kazakhstan with international markets, as well as the potential development of hydrocarbons reserves under the Caspian Sea.

1.11 Reforms in the financial sector have also started. New legislation covering the central bank and commercial banks has been approved, credit auctions have been introduced to increase competition in the allocation of funds, and new prudential supervision standards have been established. In April 1993, Parliament approved new statutes for the National Bank of the Republic of Kazakhstan (NBRK), a law on banking activities and a new foreign currency law. The new NBRK act gives the central bank increased independence from the Government, establishes the legal foundation for the conduct of monetary and credit policies, and provides the NBRK with the authority to regulate and supervise the banking system.

1.12 Outside of the oil and gas sector, sectoral reforms have been limited. The Government has begun considering reform strategies for the coal and power sectors. Similarly, despite offering significant export earnings potential, reforms in the mining sector have been limited to increased operating independence. The Government has not yet articulated a consistent vision for agricultural reform either. Reforms so far have focused on removing most administrative price controls and reducing price subsidies. In the transport sector, however, the Government has begun to put in place the legal and institutional framework for the emerging market for transport services. It has also initiated privatization of trucking and opened entry to the road transport market. In addition, as shown by this project, the Government is committed to implement structural reforms to promote the efficiency of urban public transport in the main cities.

II. THE URBAN TRANSPORT SECTOR

A. Population and Urbanization Trends in Kazakhstan

2.1 The Republic of Kazakhstan is relatively urbanized and its pattern of urbanization is characterized by a large number of medium size cities. The country's 1990 population was 16.7 million, of which 9.7 million (about 58%) resided in urban areas. Of this amount, about 6.9 million persons resided in some 33 urban areas of over 50,000 persons each. The largest city and capital, Almaty, had a 1990 population of 1.17 million, followed in size by Karaganda (610,000), and Shimkent (439,000). There were an additional four cities with a population of more than 300,000, and a further 14 cities with populations between 100,000 and 300,000.

2.2 The urban population is growing relatively rapidly. Over the past decade, the population of the 33 largest urban settlements has grown 27%, while the national population has grown by only half as much. Over the past 20 years, these centers have accounted for about 70% of the total population growth of the Republic. Details are in Annex 2.1.

2.3 While the economy of Kazakhstan relies very heavily on its mineral wealth, as well as on farming, the country's urban areas serve as important manufacturing and service centers which are critical to the economy. Some of the country's largest cities (like Karaganda) are mining centers where a majority of the employment is in mines or related processing industries. Central to the continued functioning of the urban economy is the urban public transport system.

B. Main Features of Urban Transport in Kazakhstan

2.4 As in most other FSU countries, the urban population of Kazakhstan is highly dependent on public transport. Private car ownership is low by developed country standards, amounting to only 84 vehicles per 1,000 persons, as compared to over 400 in Western Europe and 550 in the USA. As a result, over 90% of all urban motorized passenger trips are by public transport. In addition, average passenger trips are relatively long because of city structure (low density and long distances to satellite neighborhoods) and, especially, low housing mobility. Moreover, the harsh climate severely constrains the use of non-motorized modes of transport. The population's dependence on public transport is highlighted by the high proportion of the urban population which uses public transport daily. This proportion is 50% to 100% higher in Almaty than in other major Asian cities.

2.5 The supply of public transport has been diminishing and is not adequate to meet demand. The national fleet of 13,000 public buses which are used for urban and suburban services is old and in poor condition. There have been very few additions to the fleet in the past two years, and replacements have been lagging behind needs since about 1988. As a result, the public transport fleet is about 20% smaller today than five years ago. In addition, because of the companies' poor financial situation, the lack of foreign exchange, and numerous disruptions in the FSU manufacturers' plants, the shortages of spare parts and supplies have been acute. The availability of existing buses is now about 55-60% on average, down from 75-80% in the mid 1980s.

2.6 In the past, all common carrier road transport services were provided by the Republican Ministry of Automobile Transport, but now public transport is provided by very large state owned companies with a de facto monopoly. In general, these are regional road transport companies which often combine freight, urban and inter-urban passenger transport services and belong to the regional (oblast) governments. In the absence of a well-defined legal framework for state-owned enterprises in Kazakhstan, the legal status of the public transport companies, especially the rules for governance, is unclear. The companies' senior management groups generally appear to be extensions of the regional government. Managers have no clear, precise performance objectives, but they do have considerable operational freedom and are not systematically supervised. Nonetheless, the companies' finances are tightly controlled. Through this control, and in the absence of a well-defined budget process, the regional governments can interfere indirectly in most of the key decisions of the companies. This situation does not make for efficient and well-managed entities; therefore, the project aims at improving the institutional structure and modus operandi for public transport companies in the cities of Almaty, Karaganda and Shimkent (para 2.19). It is expected that this project will provide a model framework for other cities in the country.

2.7 A distinguishing characteristic of public transport systems in Kazakhstan (as well as in other FSU countries) is the limited variety of services. There are very limited mini-bus services, no premium services providing higher comfort and convenience levels, and limited legal and illegal taxi services. Virtually all public transport services are provided by the public sector monopolies described above, which operate relatively large buses on fixed routes in accordance with a fixed schedule and a standard fare. This situation may change rapidly with the emergence of private operators (para 2.11). In most other cities around the world where public transport systems are prevalent, there is a much greater variety of services.

2.8 Urban passenger transport fares have traditionally been very low. This situation has been exacerbated by the recent inflation and fall in personal incomes. In most cities, fares were equal to about 15-20% of the operating cost of urban bus services in June 1993, excluding investment costs. In addition, about 30% of all passengers are exempted or benefit from reduced fares¹. Although this is not sound from a financial and economic point of view, it should be remembered that perhaps 40% of the population has fallen below the poverty level with their incomes consumed mostly by basic needs. Local governments are therefore very reluctant to increase fares. In June 1993, if fares had been sufficient to cover operating costs, a family in Almaty with a median income would have spent about 20-25% of its resources on public transport. Nevertheless, under the project, substantial measures will be taken to improve cost recovery of public transport services in Almaty, Karaganda, and Shimkent (para 2.42).

2.9 Until recently, urban passenger transport was subsidized by the central government which, in particular, supplied all equipment. In all cities (with the principal exception of Almaty), urban passenger transport was also cross-subsidized by the companies' other services, which usually generated a profit (intercity passenger and even freight services where provided). This situation has changed drastically in the past two years. The companies' costs have increased

¹ It is also estimated that about 10-20% of all passengers evade payment.

faster than their revenues, which has eliminated the possibility of cross-subsidies in most cases. The central government has also passed on to the regional governments the responsibility for funding public transport and has almost entirely stopped its grants to the companies. By early 1993, the financial situation of many companies was desperate. They could not meet their recurrent costs (including payroll in some cases) and had to run arrears with their suppliers and borrow from the banking system. Consequently, a law was passed authorizing regional governments to levy a special tax for the purpose of funding public transport and most governments have now taken advantage of the new law (para 2.38).

2.10 For the time being, the Ministry of Transport (MOT) has rightly focused its activities on defining the sector's legal and institutional framework. MOT was one of the first in the FSU to move away from an operational role and concentrate on policy and regulatory issues. It is responsible for all modes of transport except highways. It has a very limited staff of about 95 persons. The department of road transport, which, among other things, is responsible for urban transport, has only four people and is organized on a functional and not subsectoral basis. Because of the urgency of its work on policy and regulatory issues, MOT has not been able to fulfill its other responsibilities in urban transport, such as setting norms and standards, monitoring sector developments, and disseminating new technologies. It needs to develop the capability to do so as soon as possible. The other main sector responsibilities involving the supervision and funding of public transport companies, managing traffic, and administering the urban road network, have been given to the regional and city governments who are still organizing themselves to undertake these responsibilities. In key areas, such as company supervision, the local governments will need external support.

2.11 The Government approved in May 1993 a new regulation for the licensing of road transport operators which is based on sound principles and especially provides for a simple and open system. It should, therefore, allow the development of a competitive and diversified private sector in road freight and passenger transport, including urban transport. Although the framework is well-defined, the specific criteria on which licensing will be based are yet to be established. How the new regulation, which, in urban public transport, needs to include measures to coordinate among competing services, should be applied needs to be defined and enacted. The project will assist with a review of licensing standards, procedures and relevant regulations and with the competitive tendering of public transport. The review will provide detailed recommendations on the regulations required, as well as monitoring and enforcement measures necessary to ensure adequate service for passengers and efficient business practices. These recommendations will take into account the experience of other countries which have encouraged competition in urban public transport. The Government has agreed to complete the review by March 31, 1995 and decide by June 30, 1995 on the improvements to implement (Annex 2.2, para 9).

2.12 Road traffic is in general much less dense in Kazakhstan's cities than in other countries with similar levels of income. This situation is explained by the relatively generous size of the urban road network (due to the recent development of most cities in Kazakhstan), the low car ownership, and the absence of non-motorized traffic and roadside activities. Also, in the few areas with substantial traffic density, adequate traffic management measures have generally been established. As a result, average vehicle speeds (including that of buses) are quite high and trip

times are short. This could change in the future, however, as the use of private cars is increasing rapidly. Road networks, which are now satisfactory for the cities' levels of traffic (although there is much variation within and between cities), could also deteriorate quickly because of funding for maintenance is inadequate and truck traffic is likely to become denser and heavier. Currently, although there are few potholes and deformations, roads are relatively rough and surfaces are worn out in many places, and badly require periodic maintenance.

2.13 Air pollution is a significant problem in Kazakhstan and it has been reported that 18 cities did not meet the FSU's air emission standards. In seven of these cities (including Karaganda and Shimkent), vehicle emissions reportedly account for 20% to 50% of total air pollution; in five cities (including Almaty) vehicle emissions may account for over 50%. The main reason for high vehicle emissions is that most engine are gasoline powered, technologically obsolete, and fuel inefficient. It is also estimated that in Almaty, which, because of its unusual geographic characteristics, has the worst air quality of Kazakhstan's major cities, buses may contribute 10% to 20% of total air pollution. The project will reduce air pollution by helping rehabilitate most of the diesel buses and electric trolleybuses, as well as replace old polluting gasoline buses by new diesel buses.

2.14 At present, there is little professional experience in air quality standards and no entity working on the updating of such standards in Kazakhstan. A law on environmental matters was enacted in 1991, but it does not adequately address the problems of air pollution. In addition, there is minimal monitoring and enforcement capacity in the country. The World Bank is planning to carry out an Infrastructure Review in 1995 which will address these environmental issues.

C. Urban Public Transport in Almaty, Karaganda, and Shimkent

2.15 The project will focus on improving public transport services in Almaty, Karaganda, and Shimkent, the three main cities of Kazakhstan. The central government and the three local governments and four project urban transport companies have committed themselves to take important short, medium, and long term measures to improve local public transport services. The principles upon which the measures are based, the measures themselves, and the key steps to be taken in the short term for their implementation are stated in the Policy Statement and Action Plan for Improving Public Transport Services in Almaty, Karaganda, and Shimkent (PSAP), details of which are in Annex 2.2. The central government and the local governments of Almaty, Karaganda, and Shimkent have jointly signed the PSAP and it has been formally confirmed by decree dated January 10, 1994, of the Cabinet of Ministers. In addition, the central and local governments and the four project companies have substantially adopted an Implementation Program that defines through a set of specific government decrees and company orders, most of the responsibilities and actions to be performed by each concerned party for the implementation of the PSAP as well as the project (para 4.17 and Project File). The Implementation Program needs to be complemented on a few key points, however. Complementary decrees and orders, acceptable to the Bank, will be formally adopted as a condition of loan effectiveness. At Negotiations, it was also agreed that the Project would be implemented in accordance with the PSAP and that failure by a local government on a project

company to perform any of its obligations under the Implementation Program could be cause for loan suspension or cancellation (para 6.1).

Public Transport Companies and their Organization and Staff

2.16 Four separate companies provide almost all public transport in the project cities: two in Almaty (one for autobus transport and one for electric - trolleybus and tram - transport), and one each in Karaganda and Shimkent which combine both modes of transport. These companies will be the main beneficiaries of the project together with MOT and the local governments. The bus company of Almaty is mostly an urban public transport company, but it also provides many charter services for the personnel of industrial enterprises in the urban area, as well as for tourism and special purposes. On the other hand, the passenger transport companies of Karaganda and Shimkent are regional companies providing city and intercity services. In general, the organization of the four companies is fairly similar to that found in many western companies. The main operational units are the depots which have their own facilities, vehicle fleets, pool of drivers, and assigned routes. The depots have some management and financial autonomy, but they are tightly controlled by the central departments which have main responsibility for equipment and maintenance, operations, finance, and personnel. The system is satisfactory although some decentralization, in particular for maintenance and operational matters, could promote efficiency.

2.17 The four companies have a large workforce². Yet, with staff per vehicle ratios between 3.5 (Karaganda and Shimkent) and 5.0 (Almaty Electric Transport Company), they are relatively understaffed if compared to average companies in developing countries³ (although the availability of vehicles is not taken into consideration in either case). The workforce is in general well trained and capable. However, a major problem is the insufficient number of drivers (paras 2.29 to 2.31).

Governance of the Public Transport Companies

2.18 The legal conditions and the specific rules and procedures for sound governance of the public transport companies are not in place. This is a reflection of the general problem of governance of state-owned enterprises in Kazakhstan. First, the legal status of the project companies is unclear. Only two (the electric transport company of Almaty and the public transport company of Shimkent) are registered enterprises, but they are registered under the 1991 public enterprises law which has many unsatisfactory aspects and is in the process of being overhauled. For the two other companies, the depots are the registered enterprises, leaving the central management groups, the real decision-making centers of the companies, with no legal status. Second, the charters of the companies are too vague. They do not provide clearly for autonomy of the companies nor for an efficient control by the companies' owners -- the regional governments. There are no boards of directors, no procedures or clearly assigned responsibilities

² About 7,500 and 2,800 employees for the bus and electric transport companies of Almaty, 9,000 for Karaganda, and 8,700 for Shimkent, although in the latter two cities less than 50% of the workforce is involved in city transport.

³ A ratio of between three to eight is deemed satisfactory in the World Bank 1986 Urban Transport Policy Paper.

for defining and monitoring the companies' policies. The flows of information are also inadequate. As a result, the power and accountability of the companies' senior managers are diluted. Third, the contracts between the companies and the local governments are also far too vague. They do not include adequate performance indicators and thus do not provide real incentives for improving efficiency. There are also no links with the companies' budget, nor with the process for granting subsidies.

2.19 The Government is aware of the lack of a legal and institutional framework for urban transport, but has not been able to take remedial measures, partly because of the tradition of command systems and partly because it is unaware of solutions developed in other countries to improve the management of public enterprises. As part of the PSAP, the Government has committed itself to the establishment of a sound framework for governance of the companies. In particular, this includes: (i) improved charters for the companies to provide more operational autonomy; (ii) performance contracts between the companies and the local governments based on allocation of subsidies linked to quantifiable objectives and targets; and (iii) a suitable level of supervision by the local governments. A study will be carried out by March 31, 1995 to formulate proposals, and decisions on implementation will be taken soon thereafter so that adequate charters and contracts can be used on a pilot basis between June and December 1995, and effectively start by January 1, 1996 (Annex 2.2, para 7). The project will provide the assistance necessary to put such a framework in place.

Competition and Private Provision of Public Transport Services

2.20 There is currently little competition for the provision of public transport in the project cities. Legal and illegal taxi services are developing but, in the long term, they will cater mainly to higher income passengers. Some illegal bus services are also reported to have started and help alleviate the current urban transport shortage. The Government has recognized that private operators should play an important role in the provision of road transport, including urban public transport, and has approved sound regulations for entry in this sector (para 2.11). On completion of the central government's review of licensing standards, procedures and regulations for urban transport, the three project cities, in accordance with the PSAP, will decide upon measures to promote efficient competition in public transport.

2.21 At present, large fleets of buses are held by non-transport companies, especially industrial enterprises, for the transport of their employees. These buses are not used efficiently so that there is potential for competitive tendering of some bus routes in the project cities. Such tendering, which has been successful in several countries (including the United Kingdom), is one way of promoting private provision of public transport while maintaining a certain level of subsidies and should be tested in Kazakhstan. Under the PSAP, the Government will prepare by June 30, 1995 suitable measures for the competitive tendering of public transport. This tendering will be implemented on a pilot basis on at least two routes in Almaty, Karaganda, and Shimkent before December 31, 1995 (Annex 2.2, para 8).

Transport Demand

2.22 Statistics on passenger traffic are presented in Annex 2.3. The main characteristics that they highlight are the large number of trips in relation to city size (para 2.4), the predominance of autobus transport⁴, and the recent fall in recorded traffic. There is no doubt that transport demand has fallen not only because of the very poor quality service now offered by public transport (notably the crowded conditions and the irregularity of service), but also because of the decline in economic activity and fall in personal incomes. The fall in demand may not be as pronounced as shown in the statistics, especially since exempted passengers are not recorded properly. More importantly, given crowded conditions, it has become impossible to enforce payment of fares and the number of fare evaders has dramatically increased. An extended survey, started in Almaty in May 1993, should help to clarify the situation by providing better traffic statistics.

Equipment and Maintenance

2.23 As in the other main cities of Kazakhstan, there is a serious problem with the availability and utilization of the project companies' vehicle fleets. Detailed data is provided in Annexes 2.4, 2.5, and 2.6. The operational indicators in Almaty, Karaganda, and Shymkent compare poorly with those rated as satisfactory in the World Bank's 1986 Urban Transport Sector Policy Study, and show that existing assets are not used as well as they could be. Availability ratios for buses range from 54% (Shymkent) to 66% (Almaty) compared to satisfactory levels of 80-90%. Daily rates of breakdowns are estimated to be about 15% of the operating fleet compared to satisfactory levels of 8-10%. Utilization of buses as measured by the kilometers per bus per day range from about 190 (Shymkent) to 223 (Karaganda), compared to satisfactory levels of 230-260 km, although with the light road traffic conditions much higher results than average should be expected. These ratios apply to a fleet which has decreased substantially in the recent past. As a result, there is not even enough capacity to ensure a minimum level of service in the project cities.

2.24 There are many reasons for this situation most of which are beyond the control of the project companies. First, there has not been adequate vehicle replacement in the past few years. Second, the vehicle fleets are in very poor condition because many vehicles were not well built and have been poorly maintained in the past few years due to the lack of funds and the acute shortage of spare parts. Many vehicles are kept in operation only because of the ingenuity of the repair staff and the intensive parts recycling practices that have developed⁵. Buses manufactured in Hungary have a higher performance and therefore carry a substantial share of traffic (about one third in Almaty while they constitute only 15% of the country's fleet). However, as shown

⁴ In Almaty and Shymkent, electric transport (mostly trolleybuses) plays an unusually important role. In Almaty and Karaganda the tramway system, which is obsolete, is of little importance. Suburban railway traffic is insignificant in the three cities.

⁵ Parts and components, which usually have a service life far shorter than is common in western countries, are rebuilt several times beyond what sound technical practices would dictate. Older vehicles are also extensively cannibalized. As a result, vehicles are fragile and need very frequent repairs, and buses are slow, fuel inefficient, and polluting.

in Annex 2.5, the availability of these buses is well below average because the project companies have little access to the foreign exchange needed to purchase spare parts.

2.25 Although repair workshops generally show an impressive ability to put vehicles back in operation, they need to improve in several important ways. There is not enough control of the quality of the repairs being performed and productivity is generally low. Also, because of a lack of flexibility in repair schedules, the number of vehicles available during peak periods is not maximized. Repair workshops should adopt more modern management methods including better quality control and information systems to follow up the repair history of each vehicle, and subordination of maintenance activities to operational needs. The workshops also require better tools and measurement equipment. Assistance will be provided under the project through training, technical assistance, and equipment. However, it should be kept in mind that lasting progress will be achieved only if there is a more predictable supply of spare parts. In order to monitor improvements in performance, targets for improved availability of vehicles for the four project companies have been included in the PSAP (Annex 2.2, Attachment 1).

Operations

2.26 As mentioned earlier, the quality of service offered to passengers is extremely poor and has now reached a crisis level. Vehicles are so overcrowded during the peak periods that there is a safety problem for children and older people, particularly when getting on or off at bus stops. Waiting times are also especially long outside peak periods and during the weekends. Statistics on the daily numbers of passengers carried per operating bus show the poor level of service (Annex 2.6). These numbers are about 50% higher than the international norm although they should be substantially lower given that, in the project cities, the average vehicle size is below that in most comparable cities, vehicles are slower (because of poor condition), and the number of hours of operation is reduced because of frequent daily repairs and the shortage of drivers.

2.27 Despite these poor results, the transport planning and operational capability of the project companies is satisfactory. The route networks are generally well-designed. All parts of the towns are well served and, with the high density of demand, it has been possible to minimize the number of connections per passenger. The various modes of transport (autobus, trolleybus, and tram) complement each other. Large scale passenger demand surveys and studies of good quality have been carried out at frequent intervals in the past by the National Institute of Automobile Transport (NIAT). These have led to appropriate changes in routes and frequencies. The project companies also make frequent small-scale adjustments to demand, although the lack of computers makes such revisions time-consuming. In general, the staff are competent and work methods are good.

2.28 The allocation of transport capacity is followed up on a daily basis and efforts are made to make the best use of available resources. Nevertheless, improvements are necessary in the control of transport operations. Currently, control is very much based on an operational aid system which automatically registers the movements of buses. However, the system has broken down in many places and is hard to repair. It is also somewhat irrelevant in the current crisis situation and should at least be supplemented by better field management and supervision of the

drivers and, possibly, telecommunications. In addition, operational performance indicators need to be improved so as to show better, and more concisely, how the company and each depot perform in relation to the given targets. Assistance will be provided under the project to improve operational management through technical assistance, training and study tours for staff of the project companies so that they can learn about organization and management methods in other countries. Targets for improved operational performance have also been agreed by the project companies and included in the PSAP (Annex 2.2, Attachment 1).

2.29 Until recently, a shortage of drivers was a major operational problem in Almaty, compounding the difficulties due to the companies' inadequate vehicle fleets. As reported to the World Bank preparation mission, about 120 buses out of an available fleet of 870 were not used on an average day in April 1993 because of lack of drivers. An additional 120 buses were not in operation during the peak morning or afternoon hours because the shortage of drivers restricted the use of these buses to one workshift. Similarly, about 60 trolleybuses out of an available fleet of 287 were not used and an additional 32 were used for only one workshift on a typical day. Rough calculations showed that the Almaty bus company needed about 500 additional drivers and the electric transport company needed 250, or an increase of about 25% each.

2.30 Many factors accounted for the shortage of drivers but most related to the rigid allocation of drivers to a specific vehicle, a practice common in the FSU. This system has many positive aspects, especially since it fosters a sense of responsibility among drivers and promotes initiative. However, the serious drawback was that vehicles were not operated with a substitute driver if the assigned driver was absent. In addition, drivers' work conditions were very difficult since drivers were supposed to supervise repairs on their vehicles and even perform some minor repairs themselves which, given the fleets' very poor condition, usually implied very long working hours. Drivers' salaries also depended on whether or not their vehicle was working properly which, in the current circumstances, meant that their salary was unpredictable and not linked to quantity of work. Thus, the work of a driver became unattractive and, with new opportunities available in the expanding parts of the Kazakhtani economy, large numbers of drivers left the companies. Drivers who took on temporary work whenever available may also have been a factor behind the high rate of absenteeism. The employment of drivers was made worse by the unusually demanding training requirements, including a six months training period and about 450 hours of mechanical training before being certified. There was no real justification for this requirement since about a month of training is generally judged sufficient in western countries.

2.31 The Almaty City government has taken some key measures to make it possible to reduce the shortage of drivers in Almaty. Drivers' salaries have been increased in real terms. Training requirements have also been revised so as to reduce the training period from six to two months. In addition, the project companies in Almaty are in the process of establishing a pool of reserve drivers to increase the use of available vehicles during peak hours. Use will be made of temporary drivers available through the district military committee. Furthermore, a preliminary plan of action stating further measures to be taken to increase the number of bus drivers has been submitted to the Bank. These measures are expected to go a long way towards reducing the shortage of drivers in Almaty. However, the action plan needs to be complemented by the

addition of sufficient details on the measures already taken and its coverage needs to be extended to the Tram/Trolleybus company. It has therefore been agreed that, as a condition of loan effectiveness, the Almaty City government would submit a revised plan of actions, acceptable to the Bank, for reducing the shortage of drivers (para 6.2). In the loan agreement, this plan of action will be considered as a part of the Implementation program (para 4.17).

Finance

2.32 **Financial and accounting systems.** The four project companies have : similar financial organization; they all have a central financial department responsible for the company's financial policies, supervising the depots, securing funding, preparing financial reports and cash forecasts, preparing the budget, and handling large financial transactions. The depots have limited financial autonomy; they keep their own revenues and receive funds from the central financial department, pay wages and some suppliers, and maintain their own accounts. This general organization is satisfactory. The companies, however, need additional financial staff, although those in place are generally well trained and competent within the limits of financial practices in the FSU.

2.33 The companies' accounting systems are decentralized with each depot maintaining its own accounts. In general, the project companies' accounts were found adequate and well-organized and, in particular, files and original documents were available to support records and accounts. Accounting procedures follow detailed guidelines from the Ministry of Finance and the companies' central financial departments issue detailed written procedures to ensure consistency among depots. Accounting guidelines provide for a double entry system that produces balance sheets and income statements. Financial reports appear to be generally consistent with standard financial reporting, although there are differences from customary international reporting practices, e.g., regarding equity, depreciation and social costs. With some modifications, these systems should be capable of producing standard format reports that give separate financial results for city bus and tram/trolleybuses operations. For those city depots which also provide intercity transport as well as charter services (especially in Karaganda and Shimkent), urban passenger transport operations should be kept quite separate. Given that detailed records are already kept, it would not be difficult for the companies to establish procedures for reporting on city operations. Improved procedures are also necessary for cost accounting, which should be easy to introduce as the companies already keep detailed records for each vehicle in the fleet and can provide costs by depots and by type of vehicles. The assignment of shared costs could be improved, however, and the system should be able to better support operational decisions, e.g., by showing costs per route. The companies' staff appear eager to implement these improvements but they need outside expertise, training and especially better data processing equipment, all of which will be financed under the project.

2.34 The companies have adequate internal financial controls although there are a few exceptions which should soon be rectified. In particular, there are satisfactory procedures for purchasing and receiving goods, making payments, and inventory control. Internal and external audit procedures need considerable improvement, however, and although the companies have some staff for internal audit, the function is not understood and little internal auditing is carried out. External audits are performed by several entities, including the state tax inspectorate, the city and oblast financial departments, and the newly created national audit agency, but such overlap is unnecessary and costly. The focus of the audits is on determining wrongdoing with

a narrow concern for how well procedures have been followed and the auditors have much leeway to interfere with micro management decisions. Instead, external audits should provide a substantive review of the meaningfulness of financial reports. Such improvements will require changes at the national level which should come about as a result of the substantial assistance now being extended or planned to help Kazakhstan establish modern systems for governance of enterprises.

2.35 The companies' budgeting procedures need considerable strengthening. At present, budgets are regarded as essentially financial forecasts used to justify subsidy requests and are based too much on norms and not enough on actual costs. They are not conceived by the companies' owners and managers as tools to formulate and monitor their business strategy or to implement improvements in efficiency. There are also no well established review and updating schedules. Improvement in budgeting procedures should be given priority to support changes in the subsidy systems and in the companies' relationships with local governments. Therefore, the project includes substantial assistance to address these issues (para 2.43).

2.36 Financial Situation. Fares were 5 Rubles per passenger and per trip in Almaty and Shimkent in June 1993, while in Karaganda the fare, which had remained at 1 Ruble since May 1992, had just been increased to 10 Rubles. The fares were about 15% of the cost of operations (excluding investment costs) in Almaty and Shimkent and 25% in Karaganda, where trips are longer. Mainly for social reasons (para 2.8), local governments, which are responsible for establishing the fares, have not raised them as much as increases in costs. They have also accepted many categories of exemptions and reduced fares, although there is sometimes no strong justification for them. Local governments are aware that public transport subsidies are taking an important share of their limited fiscal resources and that their fare policy should change, especially the system of subsidies for lower income groups (para 2.41).

2.37 Because of the low fares and rising costs, the project companies' financial situation has been very poor for some time, especially in Almaty where companies could not cross-subsidize urban passenger services from other activities. Given their shortage of working capital and borrowing constraints, the project companies adjusted as they could to cash shortages. They limited salary increases and reduced maintenance and, in particular, curtailed services with the negative results described above. They also ran arrears, mainly with fuel suppliers: the Almaty bus company and the Karaganda public transport company owed one billion Rubles and 600 million Rubles respectively for fuel in June 1993 (about five and three months of consumption respectively at current prices).

2.38 In order to alleviate the critical financial situation of the project companies, regional governments have used the law authorizing them to levy a special tax for the purpose of funding public transport (para 2.9). In Almaty and Karaganda, the tax is a percentage of the wage fund of "productive" enterprises (20% and 8%, respectively). In Shimkent, the tax is set at 1% of the value of production. The result is that substantial amounts are now being collected through these taxes. Almost 16 billion Rubles is projected to be collected in 1993 in Almaty, 8 billion Rubles in Karaganda, and 1.7 billion Rubles in Shimkent. As of June 1993, collections were ahead of projections in Almaty and Karaganda, but in Shimkent only two-thirds of the projected funds may be collected for the year. In Almaty and, to a lesser extent, Karaganda, these amounts will

allow the companies to meet all recurrent expenses and replace some of their worn out vehicles. In Shimkent, the subsidy will cover only about 50% of the needs of recurrent expenses. These increases show that considerable progress has been made in shifting responsibility for urban transport subsidies from the central to the local level, and improving cost recovery at the local level, although corrective measures are still required in Shimkent.

2.39 With the new subsidy system now in place, some short term debt has been repaid and only the Shimkent company has substantial bank debt (930 million Rubles). In the current circumstances, the companies' borrowings should remain limited. Therefore, the Government has agreed that it will require the project companies to maintain at all times a debt service coverage ratio of net revenues to debt service of not less than 2:1 (para 6.1).

2.40 The imposition of special taxes should be regarded as a temporary measure since having cost recovery through earmarked taxes is not efficient. Demand for urban passenger transport services is not based on economic prices and the transport companies' performance is not related to the level of funding received from earmarked taxes. Urban passenger transport companies, public or private, fully recover their costs through the fare box in many countries in the world, particularly Asia and Latin America. This leads to considerable efficiency gains for the companies as well as for the broader urban economy. It also facilitates the participation of the private sector in the provision of public transport.

2.41 Local governments have recognized the importance of full cost recovery and expressed the intention to raise the public transport fare as soon as possible to 100% of the operating cost (excluding investment cost) of transport per passenger. They intend to achieve this by steps, including an increase of the fare to 55% of the operating cost per passenger by June 30, 1995, provided that there is a steady increase in the population's purchasing power. As part of the PSAP, the local governments will also carry out a study of public transport demand, cost, affordability, and tariffs aimed at formulating guidelines on when and how full cost recovery could be reached in the medium to long term. The study is included in the project and should be completed by March 31, 1995. The local governments have also agreed under the PSAP to review exemptions, so that special fares are limited to the most needy groups, and to establish more effective systems for controlling fare collection. The above study of public transport demand and tariffs will help formulate recommendations in all these areas and the Government has agreed to take decisions on specific improvements by June 30, 1995. This approach is consistent with the Government's commitment under its general structural reform program, which underpins the World Bank's Rehabilitation Loan^{6/}, to eliminate subsidies for public utilities by 1997.

2.42 So as to ensure that any progress made with the latest fare increases not be eroded by the high level of inflation, the Government has agreed to increase fares regularly in accordance with the general consumer price index issued by the State Committee for Statistics. Fares have also been increased several times in the past months and are in real terms above the June 1993 level (Annex 2.2, para 2). In order to make further progress with increasing cost recovery through

^{6/} IBRD Ln 3649-KZ: Rehabilitation Loan. August 16, 1993.

increased revenues from fares, the Government has agreed that passenger fares will cover at least 25% of the operating cost of transport per passenger (based on the past six months of operations) by the time half or more of the new buses financed under the project are put into operation (para 6.1).

2.43 As stated in the PSAP, the local and central governments are committed to the provision of funds sufficient to enable the companies to operate under reasonable technical standards and minimum acceptable levels of quality of service. Therefore, as long as there is a subsidy system, it should be established on a sustainable basis and used to stimulate improvements in efficiency. This will first require substantial improvements in the companies' recurrent and capital budgeting procedures (para 2.35) so that their financial needs, as well as the financial impact of various measures to improve efficiency, can be clearly established. Second, the operating budgets should be prepared and approved each year on the basis of the actual costs of agreed levels of quality of service taking account of agreed improvements in efficiency, preferably in the context of a performance contract between the companies' management and the local governments. The local and central governments have expressed their commitment to these improvements in the PSAP. Reviews of procedures for budget preparation and subsidy allocation will be carried out by December 31, 1994 and decisions on implementation measures will be taken soon thereafter so that an adequate subsidy system can be used starting March 31, 1995 (Annex 2.2, para 6). The project includes assistance for carrying out all these activities.

III. WORLD BANK EXPERIENCE IN URBAN TRANSPORT

A. World Bank Lending

3.1 Compared to many other sectors, urban transport has not been a major area of World Bank activity. Yet, since 1972, the World Bank has had about thirty urban transport projects and an even larger number of urban development projects with a substantial urban transport component. These projects have been quite diversified in terms of content, countries, and circumstances under which they have been designed and implemented. The major objective of World Bank lending for urban transport has been to improve and extend available facilities and services through the use of low cost options. For this reason, by far the greatest emphasis has been placed on: (i) rationalization of the use of urban transport facilities, particularly urban roads; (ii) provision of better access through upgrading and extension of the road networks; and (iii) improvement in the standards and viability of public transport services. A more general objective has been to meet the special needs of the urban poor. Upgrading and extending road networks in low income neighborhoods has therefore also been a priority as well as improving the public transport services benefitting the poor. Other objectives of World Bank urban transport operations have been to improve planning and coordination and to better integrate urban transport with urban development.

B. Lessons of Experience⁷

3.2 By mid 1991, Project Completion Reports (PCRs) and in many cases Project Performance Audit Reports (PPARs) had been prepared for about fifteen urban transport projects or urban development projects with a large urban transport component (above 30% of costs). The main lessons of experience are summarized below.

3.3 With the exception of the Bangkok Urban Transport Project (UTP) which was significantly changed in scope, physical components of urban transport projects were generally implemented as planned. While some changes did take place and some components were poorly planned, the physical components proposed at appraisal proved to be feasible and supported by decision makers. Overall estimated project costs were also of the right order although wide variations in individual components occurred.

3.4 Institutional arrangements and components were considerably less successful, however. Many projects established traffic and transport units to plan, design and supervise improvement schemes. The PCR/PPARs make reference to the political problems of maintaining the units, of giving the units sufficient authority to act, of staffing the units, of obtaining adequately trained staff and of sustaining those units after the implementation of a project. In particular, the institutional problems of sustaining traffic management momentum and capabilities have not yet been solved. Many of the PCR/PPARs cite lack of enforcement of traffic regulations as reason

⁷ Based on a paper prepared by LATIN in August 1991.

for failure of traffic management schemes. Indeed, more attention should have been paid to improving police operations. In some cities, despite the implementation of physical schemes, there was a lack of long term commitment to accept traffic management measures and subsequent changes in political administration rejected the traffic management approach.

3.5 Transport policy measures were included in some, but not all projects. The results were mixed. For example, some failures were recorded in:

- a) Kuala Lumpur Second UTP and Bangkok UTP with respect to road pricing;
- b) Calcutta and Cote d'Ivoire Second UTP with respect to bus fares; and
- c) Brazil Third UTP studies for bus deregulation and maintenance.

But some policy measures were also at least partly successfully implemented, for example in:

- a) Kuala Lumpur Second UTP with respect to increases in bus fares;
- b) Bombay UTP and Madras Urban Project with respect to increases in bus fares although the increases were not enough to meet covenanted agreements regarding revenue/cost ratios.

3.6 A number of projects (Bombay, Madras, Cote d'Ivoire and Calcutta) invested in public bus or monopoly bus operations (often supplying buses). Except in Calcutta, all the companies are relatively efficient with, for example, availability of the fleet of the order of 90% and reasonable staffing ratios. All companies made operational improvements during project implementation. Nevertheless, Government was reluctant to allow bus fares to rise adequately to meet agreed revenue/cost ratios (covenanted under the loan) and for financial targets to be met, demonstrating the political difficulties of raising fares.

3.7 Project schedules were always over-optimistic at appraisal. This appears to have resulted from some, or all, of the following factors: (i) the difficulties of implementing traffic schemes; (ii) failure to complete final designs in a timely manner; (iii) unfamiliarity with World Bank procedures (especially procurement); and (iv) lack of counterpart funds.

3.8 Although the project is quite different from most of the World Bank's previous urban transport projects - it does not include any civil works nor traffic management schemes - the lessons of World Bank experience have been taken into account in its design. Implementation delays are expected to be minimized because: (i) procurement will be carried out with assistance from a central unit in the Ministry of Economy (MOE) provided with adequate staff and support; (ii) the lists of spare parts for rehabilitation of buses and trolleybuses have already been prepared; and (iii) preparation of the procurement documents for new buses is already under way. Substantial progress in the policy and institutional areas is also expected because the commitment of the Government to the agreed measures is in general high and required actions are stated in specific terms in the PSAP. The training and technical assistance has also been designed to support the Government's policies and project companies' programs. Despite these

project features, some risks remain. In particular, targets for cost recovery from passenger fares will depend on political will and the ability of passengers to pay (para 2.8). Nevertheless, a system is in place to at least recover costs at the local level through local taxation (2.38). Further discussion of risks is in Chapter V (paras 5.5 and 5.6).

IV. THE PROJECT

A. Project Objectives

4.1 The main objectives of the project are to (i) help restore public transport capacity in Kazakhstan's three main cities, Almaty, Karaganda and Shimkent to adequate levels of service quality; and (ii) design and implement some key improvements in policies and institutions described, inter alia, in the PSAP in the urban public transport sector of the three cities. These improvements especially aim at creating an environment which promotes efficiency in the sector and encourages sustainable development of the cities' public transport companies. The project is limited to three cities so as to speed project preparation and facilitate supervision. It is expected that the policy and institutional measures developed through the project will become models for improving public transport in Kazakhstan's other main cities.

B. Rationale for World Bank Involvement

4.2 World Bank involvement in urban transport in Kazakhstan is justified for three major reasons. The first is that the Government of Kazakhstan is giving priority to improving urban public transport services which are currently experiencing a crisis due mainly to the poor condition of the vehicle fleets and the shortage of foreign exchange: in this context, the World Bank can play an important role through the project in helping to establish the right expenditure priorities, providing foreign exchange, and putting in place efficient project implementation mechanisms. Secondly, based on its broad experience in the sector and, more generally in infrastructure, the World Bank can provide some key assistance to the Government in designing and implementing major policy and institutional reforms for the sector. Thirdly, as the first World Bank investment project in Kazakhstan, it will help establish a sound operational relationship between the World Bank and the Government. More generally, the project fits well the World Bank's objectives in Kazakhstan through its emphasis on enterprise reform and improving public resources management in a market economy context. It will help alleviate the current crisis in urban public transport which affects a large majority of the population, including the poorest.

C. Project Description

4.3 The project has the following main components:

- a) Provision of about 300 new standard single deck urban buses (100-110 passengers capacity);
- b) Rehabilitation of about 550 buses and 400 trolleybuses including provision of necessary spare parts and supplies;
- c) Provision of a limited quantity of workshop and office equipment and;
- d) provision of training and technical assistance.

Further details on each component are provided below.

4.4 As shown in Chapter V, the need for new buses is well over 300 but the number of new buses to be provided under the project has been determined by the loan amount. Nevertheless, the provision of such a quantity of new buses, together with the provision of spare parts, will ensure that the project companies maintain a minimum capacity in the coming years. The actual number of new buses will be adjusted on the basis of the unit price of the winning bid⁸ and of the funds needed to purchase the entire list of spare parts required for vehicle rehabilitation (which is considered a priority). Draft detailed technical specifications have already been prepared by the project companies, assisted by a World Bank financed consultant. These specifications correspond to a heavy duty urban bus adapted to local conditions; such a bus would be comparable in performance to the Ikarus buses that the companies are currently using and to which the companies' operations and maintenance practices are adapted. Specifications are being further reviewed by the Project Implementation Unit (PIU) of MOE. The allocation of new buses to the project companies has been decided on the basis of an analysis of needs as developed in Chapter V with 200 buses allocated for Almaty, 60 for Karaganda, and 40 for Shimkent.

4.5 The condition of the vehicle fleets of the project companies was reviewed during project preparation. The review found that the priority was to rehabilitate or carry out major repairs on about 550 Hungarian made Ikarus buses and about 400 Russian made ZIL trolley buses. The focus on only two types of vehicles ensures that the procurement of spare parts and supplies for repairs will remain relatively simple and quick. As part of the review, the project companies carried out a detailed analysis of their spare parts and supplies needs for these vehicles with the assistance of a World Bank financed consultant. The result of this analysis is included in Annex 4.1. The Ikarus buses make the largest relative contribution to the companies' transport capacity and their rehabilitation is thus essential to address the current capacity constraints. Trolleybuses are also considered essential because of their poor condition and the fact that they are non-polluting.

4.6 Workshop and office equipment in the project companies as well as in government agencies is inadequate and often obsolete. Modern tools and measuring equipment, in particular, are badly needed. The consultants to be engaged as a part of the project will prepare lists of high priority equipment for purchase from project funds. The total cost of these items will be limited to US\$300,000.

4.7 Training and technical assistance will be mainly (i) to assist the Government to design and implement policy improvements included in the PSAP; (ii) to assist project companies to develop their capabilities in vehicle maintenance, operations, and finance; and (iii) for project implementation. The following main tasks will be carried out:

⁸ As the international urban bus market is very segmented, and there has not been any similar international tender in recent years, there is an unusual uncertainty as to what the unit price will be. Price estimates provided to the appraisal mission by various manufacturers varied by more than 50%.

(a) Policy Improvements:

- seminars and study trips on the modernization of urban public transport policies and organization.
- analysis of public transport demand, cost, affordability, and tariffs;
- improvements in the system of fare exemptions and in the collection of fares;
- establishment of transparent procedures for allocation of subsidies to the project companies;
- improvements in the charters of the project companies and their contractual relationships with the city and oblast governments;
- formulation and implementation of measures to encourage the provision of urban public transport services by the private sector;

(b) Institutional Development:

- improvements in organization and management of vehicle maintenance;
- improvements in organization and maintenance of public transport operations;
- improvements in accounting, cost accounting, and budget preparation procedures;
- general assessment of computer needs; and

(c) Project Preparation and Implementation:

- provision of additional procurement expertise to the PIU of MOE and of third party inspection services for the new buses and possibly some key, expensive spare parts.

It is estimated that about 135 staff months of consultancy services will be required to carry out this program, of which 70 would be foreign and 65 local. Draft terms of reference (TORs) for the policy improvements and institutional development services are included in Annex 4.2. These services are conceived as a coherent package and include seminars and study trips for higher level officials which are expected to be financed by the European Community and conducted early in project implementation. Most of the cost of the training included in the project will be for trips to foreign countries and organization of seminars. A detailed program for each training session, including the lists of trainees, would be agreed between the World Bank and MOT prior to the departure of the first trainees.

D. Cost Estimates

4.8 The total cost of the project is US\$42.4 million with a foreign component of US\$40.5 million equivalent. A detailed cost estimate is given in Annex 4.3 and summarized in the table below:

**Estimated Project Cost
(US\$ million)**

Component	Local	Foreign	Total
Provision of about 300 new buses	0.5	28.0	28.5
Rehabilitation of existing buses & trolleybuses	0.7	8.3	9.0
Training and Technical Assistance	0.6	2.2	2.8
Equipment		0.3	0.3
Base Cost	1.8	38.8	40.6
Price Contingencies	0.1	1.7	1.8
Total Cost	1.9	40.5	42.4

4.9 The base costs are estimated as of March 1993. They do not include taxes and import duties since the Government intends to exempt goods and services financed by the project from such taxes. The cost of buses, estimated at US\$85,000 per bus plus 10% for an initial supply of spare parts, is based on the lowest world market prices as of early 1993. The foreign exchange cost of the rehabilitation of buses, which is mostly for imported spare parts, is based on the lists of parts prepared by the project companies, as explained in Annex 4.1. The cost of technical assistance and training is based on recent experience. Price contingencies on foreign exchange costs were based on estimated inflation rates of 2.8% in 1993 and thereafter. It is assumed that the rate of exchange will depreciate in step with local inflation; price contingencies on local costs (expressed in US\$) are therefore based on the same international inflation rates. There are no physical contingencies as the number of new buses to be purchased (by far the main component of the loan) will need to be adjusted in any case, based on actual bid prices.

4.10 The base costs for consultants' services according to category of technical assistance are given below.

	Local	Foreign (US\$ million)	Total
Policy Improvements and Institutional Development	0.5	1.8	2.3
Project Preparation and Implementation	0.1	0.4	0.5
Total	0.6	2.2	2.8

E. Financing

4.11 The World Bank loan of US\$40.0 million will cover about 94% of the total project cost and 98% of the foreign cost. The European Community will finance US\$0.6 million, or about 1.5% of total costs, for seminars and study tours. Funds to cover local costs for the project will be provided mainly by the project companies which will take responsibility for the local delivery of the new buses and the spare parts, and carry out the rehabilitation of the buses and trolleybuses at their own expense. The low local cost and, consequently, the high World Bank share of total financing are due to (i) the unusual proportion of goods, probably all foreign made, to be provided under this project, and (ii) the undervaluation of the local currency against the US dollar and other currencies. For example, the cost of vehicle rehabilitation converted at the exchange rate of March 1993 is less than a tenth of what would normally be expected in middle income countries. The new buses and spare parts will be passed on as grants to the project companies mainly to keep project arrangements as simple as possible and avoid adding a layer of complexity to the new, and still fragile, subsidy system for urban public transport. Specific appropriations will be made in the central government budget to cover the grants and their value will be calculated on the basis of the official exchange rate. The same principle will be used to enter the asset value of the new buses in the balance sheets of the project companies.

F. Implementation

4.12 MOT will coordinate and have overall responsibility for the physical execution of the project. It will also be responsible for all the technical aspects. These tasks include general coordination and monitoring, liaison with the project companies and the local governments, identification and resolution of implementation problems, ensuring that all parties to the project fulfill their obligations, preparation of quarterly reports to the World Bank (including statistics on the operation and financial performance of the project companies), finalization of the terms of reference for the training and technical assistance component, assistance and supervision of consultants, finalization of the lists of spare parts and supplies, and finalization of the detailed specifications for the buses. Within the Ministry there will be a Project Coordination Unit which will be staffed by a Project Coordinator (the Deputy Chief of Road Transport), two staff involved in economic, financial, and policy matters, one staff for coordinating the procurement of new buses and another for procurement of spare parts and the rehabilitation of buses and

trolleybuses. There will also be Project Coordination Units for the city of Almaty and the two oblasts of Karaganda and Shymkent. Local consultants for Project Coordination Units will be financed under the project. The Project Coordination Unit in MOT will be assisted and advised in procurement matters by the PIU of MOE.

4.13 Procurement will be in accordance with the Bank's Procurement guidelines. The agency for processing procurement activities will be a foreign trade agency whose terms and conditions of employment are acceptable to the Bank. The PIU of MOE will be responsible for most of the procurement work, such as preparation of the bidding and other procurement documents for new buses, spare parts, and equipment, and preparation of the various lots for spare parts and equipment. The PIU will advise the trade agency on procurement in general and on World Bank rules and procedures in particular, and ensure that procurement proceeds satisfactorily. In addition, the PIU will be responsible for disbursement and financial recording for all World Bank financed expenditures. Responsibility for procurement of consultants' services will be shared by the PIU and MOT. MOT will be responsible for all procurement, contractual and logistical arrangements while the PIU will have a coordinating and advisory role and be responsible for disbursements. A general manager, procurement manager, and an accounting officer have already been appointed to the PIU and the Government is in the process of recruiting more foreign and local staff, some of whom would be assigned to work only on procurement for this project. Foreign staff will be financed under the on-going Technical Assistance project as well as under this project. Adequate staffing and organization of the PIU, including in particular the establishment of an accounting system acceptable to the Bank will be a condition of effectiveness of the Loan (para 6.2).

4.14 Under the direction and supervision of MOT, the project companies will carry out the physical rehabilitation of buses and trolleybuses. They will each submit a detailed rehabilitation plan for the approval of MOT and the Bank at the time of ordering of the spare parts. These plans will be the basis for setting up the quantities and delivery schedule to each of the companies. The project companies in general already have the personnel, workshops, and equipment needed to carry out these functions, but they need the spare parts and some key additional tools to be provided by the project. The project companies will also provide MOT with all the information and technical support required to carry out the responsibilities set forth in paragraph 4.12 above.

4.15 Through the above arrangements, maximum use will be made of the core group of experts in procurement and disbursement, which the Government is now developing in the PIU. Staff of MOT will also be freed from the nitty-gritty of procurement and disbursement and able to concentrate their attention on implementation of the project's policy improvements and institutional development activities. The PIU has similar responsibility for the two first loans to the Republic of Kazakhstan now approved by the World Bank, the Technical Assistance and the Rehabilitation loans.⁹

^{9/} Ln 3649-KZ (op. cit.) and Ln 3642-KZ: Technical Assistance. 1993.

4.16 Although it is not expected that the loan for this project will be effective until the second quarter of 1994, project implementation needs to be initiated as early as possible so as to award some contracts as soon as the loan becomes effective. Draft technical specifications for the new buses, detailed lists of spare parts for buses and trolleybuses, and draft terms of reference for training and technical assistance have already been prepared. The PIU will now be working on the finalization of the procurement documents so that procurement can begin in early 1994. The implementation schedule (Annex 4.4) has been agreed by the Government and the Bank. Project completion is scheduled for December 31, 1996 to allow sufficient time for the training and technical assistance components.

4.17 An Implementation Program containing all the substantive provisions of the PSAP as well as the actions to be taken by the local governments and project companies has been substantially adopted by the Government (para 2.15). More specifically, the Implementation Program consists of:

- (i)** a decree adopted by the Cabinet of Ministers with (i) a description of the goods and services, financed under the project, to be granted upon the effectiveness of the loan agreement to the local governments; (ii) a description of key conditions for such grants; and (iii) instructions to the local governments to implement the decree;
- (ii)** decrees adopted by the three local governments with (i) a description of the goods and services to be granted to the project companies, (ii) a description of key conditions for such a grant; and (iii) instructions to the project companies to implement the resolution; and
- (iii)** orders adopted by the four project companies accepting the condition of the grants and committing the project companies to implement the obligations described in the decrees of the Cabinet of Ministers and the local governments.

G. Procurement

4.18 The buses and some of the spare parts, supplies, and equipment will be procured by international competitive bidding (ICB) carried out in accordance with World Bank Guidelines; bidding documents will be based on the World Bank's Standard Bidding Documents for Procurement of Goods. For the buses, special care will be taken to ensure that the manufacturers are well qualified, financially and technically, to carry out the contract on schedule, to provide buses with a proven record of dependability and to establish adequate maintenance and spare parts support in Kazakhstan. The contract will be awarded on the basis of lowest lifetime cost based on documented data to be provided by the bidders (see Annex 4.5). Procurement consultants will assist the Borrower in setting forth the procedures to obtain the information for determining the contractors' qualifications and the lifetime cost. Consultants will also assist the Borrower in establishing the appropriate in-plant inspection and testing procedures and in carrying out this work. Items of a proprietary nature or manufactured by a single supplier, subject to approval by the Bank, will be procured through direct contracting for a maximum

total value of US\$6.3 million. Other items of small value, estimated to cost US\$0.25 million or less per contract, will be procured through international shopping (IS) up to an aggregate amount of US\$ 0.8 million per contract (at least three quotations will be secured from at least three member countries). Larger contracts, except for direct contracts, will be let on the basis of ICB. The rehabilitation of vehicles, estimated to cost US\$1.0 million, and putting of new vehicles into operation, estimated to cost US\$500,000, will not be financed by the Bank but will be a local contribution of the project companies which will supply the necessary labor and workshop facilities.

4.19 The experience gained under the First Rehabilitation Project in the Russian Federation (which included the provision of large amounts of spare parts for urban buses) will be used in selecting the procurement method for the project. Consultants will be engaged using procedures set forth in the World Bank's Guidelines for Use of Consultants (August 1981). The table below summarizes the methods of procurement; further details are given in Annex 4.5.

**Summary of Procurement Arrangements
(US\$ million equivalent)**

Project Element	Procurement Method			Total Cost
	ICB	Other	NBF	
1. Goods				
a) New Buses	29.4 (29.3)		0.5 a/	29.9 (29.3)
b) Spare parts and supplies and equipment	1.5 (1.5)	7.1 b/ (6.9)		8.6 (8.4)
2. Rehabilitation of vehicles			1.0 a/	1.0
3. Consultancies		2.3 c/ (2.3)	0.6	2.9 (2.3)
Total	30.9 (30.8)	9.4 (9.2)	2.1	42.4 (40.0)

Note: Figures in parentheses are the respective amounts financed by the World Bank.
NBF: Not Bank Financed

a/ Largely services (such as labor and workshop facilities) provided in kind by the project companies.

b/ Includes direct contracting for proprietary items (US\$6.3 million) and international shopping (US\$0.8 million).

c/ Services will be procured in accordance with World Bank Guidelines: Use of Consultants by World Bank Borrowers and by the World Bank as Executing Agency (Washington, D.C., August 1981).

4.20 All direct contracts, goods contracts for packages over US\$250,000, and all consultants and training contracts will be subject to the Bank's prior review. Other contracts will be submitted to post review. The total value of contracts subject to pre-review will be US\$39.4 million.

H. Disbursement

4.21 The Loan will be disbursed on the basis of 100% of foreign expenditures for imported goods, 100% of local expenditures (ex-factory costs) for goods procured from local manufacturers and 70% of local expenditures for other goods procured locally, and 100% of the costs of consultants' services and training, net of tax. The estimated disbursement schedule is in Annex 4.6. It is not in accordance with disbursement profiles for transport projects because the project is of an unusual nature. Most disbursements will be for a few contracts to be let in 1994 and the contracts will have a relatively short manufacturing/delivery period. Retroactive financing for consultants' services for an amount not to exceed US\$ 200,000 will be provided under the project for expenditures incurred after January 1 1994 and before the date of the loan agreement. Loan closing date will be June 30, 1997.

4.22 In order to facilitate and expedite disbursements, a Special Account in dollars will be established for the Borrower in a commercial bank on terms and conditions acceptable to the World Bank. There will be an initial deposit of US\$1.0 million sufficient to cover expenditures to be paid from the Special Account over four months. All disbursements under the project will be made against standard documentation except for goods contracts valued at less than US\$100,000 equivalent, which may be claimed under Statements of Expenditures (SOE) with related documentation retained by the PIU for review by World Bank supervision missions.

I. Reporting, Accounting and Auditing

4.23 The Government has agreed that:

- a) project accounts as well as the accounts of the project companies will be maintained in accordance with procedures acceptable to the World Bank; the procedures were discussed during appraisal and will be agreed upon during the Project Launch Workshop mission;**
- b) all project records and accounts, including those for the SOEs and the Special Account as well as the accounts of the project companies will be audited annually in accordance with procedures acceptable to the World Bank by independent auditors acceptable to the World Bank; and**
- c) the World Bank will receive certified copies of the audit reports no later than six months after the end of each fiscal year of the borrower.**

4.24 Quarterly progress reports covering all components will be prepared by MOT and sent to the World Bank within one month of the end of each quarter. The first report will be issued before April 30, 1994. These reports will include:

- a)** progress achieved against agreed implementation and disbursement schedules;
- b)** programs and cost estimates for the coming quarter and for the total project;
- c)** progress with the implementation of the PSAP; and
- d)** operational statistics and financial statements of the project companies.

The main purpose of these reports will be to provide managers and the World Bank with timely and updated information on implementation of the project, highlighting issues and problem areas, recommending actions and commenting on progress in implementing previous recommendations. MOT will also prepare a project completion report in accordance with World Bank guidelines no later than six months after completion of the project.

J. Project Supervision

4.25 Three World Bank supervision missions per year, each staffed by a transport specialist, a financial specialist, and one or more specialists in urban transport equipment and operations, each of about two weeks duration, will be required during the two and three quarter years of project execution. Missions will review all components of the project as well as institutional and policy measures related to the project and the status and development of urban transport operations in the three project cities. A Project Launch Workshop will be held in April 1994 and mid-term review of project implementation in April 1995. The project's supervision plan is in Annex 4.7. A key part of the supervision will be to follow up on implementation of the PSAP including policy and institutional measures and key operational indicators included in the PSAP (Annex 2.2, Attachment 1).

K. Environmental Aspects

4.26 The project is expected to have a positive impact on the environment because, on balance, it would produce more favorable than unfavorable consequences. The project has a C rating. The main environmental changes to be expected from the project are that the project companies in the three cities will be operating a larger number of vehicles, but a substantial part will be new or rehabilitated diesel buses which will produce substantially less noise and air pollution per bus. The increase in transport capacity will also allow the project companies to retire some of their oldest buses which are gasoline powered, noisy, and very polluting. In addition, the improvement in vehicle maintenance which is expected to result from the technical assistance and the provision of better tools and equipment will help reduce vehicle emissions. Finally, the project will help maximize the use of non-polluting trolleybuses.

V. PROJECT JUSTIFICATION AND RISKS

A. Project Justification

5.1 The project's main justification is that it will help considerably to alleviate the public transport companies shortage of capacity in Almaty, Karaganda, and Shimkent. Due in part to this shortage of capacity and the resulting poor quality of service, public transport demand has dropped by an average of 30% in the past few years in the three cities. Given that there is no alternative to public transport for most of the population, the impact is considerable on personal lives, labor mobility, and the functioning of markets. The poorer and older parts of the population are also disproportionately affected. The high direct cost of time lost, poor quality of service, and trips lost (and therefore the high opportunity cost of not doing the project) is shown by people's willingness to use the informal taxi and minibus services that have recently sprung up and which are much more costly than the project companies' services. However, it is not possible to make a sound assessment of the project's economic rate of return since no study is available of time values, trip values, and trip duration under different supply scenarios. It should nevertheless be considered that the project is part of the least cost solution to provide a minimum level of service quality. This is demonstrated by the analysis in para 5.3 which shows that large numbers of new buses need to be acquired by the three project cities to enable them to meet the minimum level of service quality deemed acceptable in the World Bank's Urban Transport Sector Policy Study (UTSPS). Since many vehicles are reaching the end of their service life and the lack of foreign exchange may limit the purchase of essential spare parts even more in the future, the shortage of public transport capacity will worsen if the project is not carried out. Service quality would become even poorer and more trips would be lost.

5.2 The project would also help put in place better urban transport policies and institutional improvements which would promote a more efficient development of the sector in the long term in the project cities. These reforms are expected to provide a model for other public transport companies in Kazakhstan and, possibly, for other state-owned companies in the infrastructure sector. In addition, the project is expected to have a positive impact on the environment.

5.3 An analysis of public transport capacity needs was carried out on the basis of data provided by the project companies on their fleets and operations in mid-1993. The analysis is also based on mid-1994 forecasts for traffic demand and vehicle availability. The analysis is based on the following main assumptions: (i) transport demand under minimum standards of service quality would be at the 1991 level; (ii) vehicle availability would reach 70% for vehicles manufactured in the FSU (which is about the best level achieved in the past), and 85% for the Ikarus buses (which assumes that these buses will be rehabilitated under the project), and the vehicles' service life would be 8 years and 12 years, respectively; (iii) vehicle daily passenger loads capacity would be the maximum of the range deemed acceptable in the World Bank's 1986 UTSPS (i.e. the quality of service would be the minimum); and (iv) the shortage of drivers in Almaty would no longer be a constraint. The results of this analysis are in the table below:

**Bus Fleet Capacity Needs in
Almaty, Karaganda, and Shimkent (mid-1994)**

City	Usable Fleet (buses)	Available Fleet (buses)	Capacity Offered	Capacity Needed (passengers/day)	Shortage Capacity	Fleet Needs (buses)
Almaty	1,011	737	865,000	1,354,000	489,000	402
Karaganda	574	452	688,000	807,000	119,000	98
Shimkent	299	228	278,000	365,000	87,000	72

Note: The analysis excludes charter buses and takes account of the recent purchase of about 100 second hand articulated buses in Karaganda. No other recent purchases, if any, have been taken into account.

5.4 The analysis shows that even after rehabilitation of the Ikarus buses, there will still be a very substantial shortage of capacity. There is a need for about 572 new standard single deck urban buses in the project cities. About 70% of the need is in Almaty (which has about 50% of the combined population), mainly because of the higher share of Almaty's bus fleet which will reach the end of its service life in the near future and because of the lower proportion of Ikarus buses.

B. Main Project Risks

5.5 There are two main project risks: (i) delays in project execution; and (ii) incomplete implementation of the PSAP. Project execution could be delayed mainly because of the Borrower's inexperience with procurement of goods and services and the lack of clarity concerning government procedures for procurement action and review and contract approval. To minimize these risks, responsibility for preparation of procurement documents and monitoring execution of procurement has been given to the PIU of the MOE, which the Government is developing as the initial focus of expertise in the country for procurement under aid projects. The PIU has trained staff, frequent contacts with World Bank missions, and access to senior government officials. The PIU will also have foreign advisers and the recruitment of these advisers is a condition of loan effectiveness (para 6.3). Furthermore, procurement has been initiated as early as possible during project preparation (para 4.16). However, problems in procedures and institutional capability remain possible and World Bank supervision work will need to ensure that these problems are quickly resolved. A specific risk concerns the relatively large contract for the procurement of new buses but bid documents have been prepared by a World Bank financed consultant to ensure speed and quality of work and are now being reviewed by the PIU.

5.6 There is also a risk that the PSAP would be implemented only partially for lack of political will or because detailed implementation measures, to be prepared with the assistance of foreign consultants, would not move fully satisfactory. Except for fare increases, however, the PSAP incorporates policies for which there is already a broad consensus, as well as a strong desire in the central and local governments to implement practical solutions. The risk of political constraints is thus reluctantly limited. Also, the technical assistance and training program has been conceived to ensure that the implementation measures are well designed, adapted to local needs, and formulated in collaboration with all parties concerned. Regarding fare increases, the local governments have already agreed to increase fares regularly in step with inflation and there will be a real increase at the time the new buses are put into operation (para 2.42).

5.7 World Bank supervision missions will need to devote enough time to supervising the preparation of measures to implement the PSAP. A formal mid-term review should take place in July 1995. More generally and especially for cost recovery, the Bank will stress that the type of actions included in the PSAP are needed to create a satisfactory policy framework for all urban and transport infrastructure subsectors. Substantial progress in implementing the PSAP would thus provide experience and demonstrate the Government's commitment for further reforms in these subsectors and could form a basis for future World Bank lending.

VI. MAIN AGREEMENTS REACHED AND RECOMMENDATION

6.1 During negotiations, agreement was reached on the following:

- (a) implementation of the PSAP and the Implementation Program (paras 2.15 and 4.17)**
- (b) debt service coverage ratio of not less than 2:1 to be maintained at all times by the project companies (para 2.39); and**
- (c) passenger fares to cover at least 25% of the operating cost of transport per passenger (excluding investment costs) by the time half or more of the new buses financed under the project are put into operation (para 2.42).**

6.2 The following will be conditions of Loan effectiveness:

- (a) adoption of decrees and orders by the local governments and the project companies, acceptable to the Bank, complementing the Implementation Program (para. 2.15);**
- (b) submission of an action plan, acceptable to the Bank, for reducing the shortage of drivers in Almaty (para 2.31); and**
- (c) adequate staffing and organization of the PIU (para 4.13)**

6.3 On the basis of the above agreements, the project is suitable for a World Bank loan of US\$40.0 million equivalent to the Republic of Kazakhstan for 17 years, including 5 years of grace, at the World Bank's standard variable interest rate.

**REPUBLIC OF KAZAKHSTAN
URBAN TRANSPORT PROJECT**

Statistics on Urban Population

Rank	City	Oblast Capital	Regional Location	Population (000)			(thousands)				
				1970	1979	1990	Percent Change 1970-1980	Percent Change 1980-1990	Percent Change 1970-1990	Absolute Change 1980-1990	Absolute Change 1970-1990
1	Almaty	x	south	730	910	1,172	24.7	28.8	60.5	262	442
2	Karaganda	x	center	523	572	609	9.4	6.5	16.4	37	86
3	Shimkent	x	south	247	322	439	30.4	36.3	77.7	117	192
4	Semipalatinsk	x	north	236	283	345	18.9	21.9	46.2	62	109
5	Pavlodar	x	north	186	273	342	46.8	25.3	83.9	69	156
6	Ust-Kamenogorsk	x	north	230	274	333	18.1	21.5	44.8	59	103
7	Zhambyl	x	south	187	264	312	41.2	18.2	66.8	48	125
8	Tselinograd	x	center	180	234	289	30.0	23.5	60.6	55	109
9	Aktubinsk	x	north	150	191	254	27.3	33.0	69.3	63	104
10	Petropavlovsk			173	207	248	18.7	19.8	43.4	41	75
11	Kustanay	x	north	124	165	234	33.1	41.8	88.7	69	110
12	Uralsk	x	west	129	167	214	29.5	28.1	63.9	47	85
13	Temirtau			166	213	213	28.3	0.0	28.3	0	47
14	Aktau	x	west	59	111	169	88.1	52.3	186.4	58	110
15	Kyzyl-Orda	x	south	122	156	158	27.9	1.3	29.5	2	36
16	Atyrau	x	west	114	131	153	14.9	16.8	34.2	22	39
17	Kokchetav	x	north	80	103	143	28.8	38.8	78.8	40	63
18	Ekibastuz			43	66	139	53.5	110.6	223.3	73	96
19	Taldy-Kurgan	x	south	61	88	136	44.3	54.5	123.0	48	75
20	Roudnyl			96	110	179	14.6	17.3	34.4	19	33
21	Zhargayghan	x	center	62	89	111	43.5	24.7	78.0	22	49
22	Balkhash			73	78	88	6.8	12.8	20.5	10	15
23	Tourkistan			54	67	81	24.1	20.9	60.0	14	27
24	Leninsk					73				73	73
25	Leninogorsk			71	68	70	-4.2	2.9	-1.4	2	-1
26	Arialyk	x	center	15	48	65	220.0	35.4	333.3	17	50
27	Nikolsky			33	49	65	48.5	32.7	97.0	16	32
28	Bakhtinsk			40	50	65	25.0	30.0	62.5	15	25
29	Kentau			46	52	65	13.0	25.0	41.3	13	19
30	Serau			49	55	60	12.2	14.5	28.6	8	14
31	Shekhtinsk			40	48	56	20.0	16.7	40.0	8	16
32	Zyryanovsk			56	51	54	-8.9	5.9	-3.6	3	-2
33	Zheostan			11	30	63	172.7	76.7	381.8	23	42
Total 33 city population				4,386	5,525	6,940	26.0	25.8	58.2	1,415	2,554
Total Urban Population				NA	NA	9,697					
Republic: total population				13,009	14,684	16,721	12.9	13.9	28.5		
Republic population outside 33 centers				8,623	9,159	9,781	6.2	6.8	13.4		
Republic rural population				NA	NA	7,024					
% of population in 33 centers				33.7	37.6	41.5					
% of population in urban areas				NA	NA	58.0					
% of total republic growth in 33 centers							68.0	69.5	68.8		

REPUBLIC OF KAZAKHSTAN

URBAN TRANSPORT PROJECT

**Policy Statement and Action Plan for Improving Public
Transport Services in Almaty, Karaganda, and Shymkent**

1. The following Policy Statement and Action Plan refers to the policies and actions to be implemented by the government of the Republic of Kazakhstan, the government of the City of Almaty, and the governments of the Karaganda and Shymkent Oblasts ("Government"), and the four urban passenger transport companies of Almaty, Karaganda, and Shymkent ("Companies").

Urban Passenger Transport Tariffs

2. The policy of the Government is to move away from the present system of cost recovery where local taxes cover the major part of costs to one where passenger revenues cover an increasing share of operational costs. As part of this policy, a Government objective is to establish as soon as possible the price of the normal passenger ticket at a level equal to the operating cost (excluding investment cost) of transport per passenger. For this purpose, the price of the ticket will be increased steadily above the rate of inflation, while still taking account of the average income of the population, especially in relation to the price of food and other basic items. In the meanwhile, to ensure that any progress made with fares increased earlier in 1993 is not eroded by the high level of inflation, the Government will take immediate measures to index fares to a local price index issued by the State Committee for Statistics. Fares will then be increased to the June 1993 level if, after applying the price index, fares are lower than the June 1993 level in real terms.

3. Government expects that the price of a normal passenger ticket will be equal to 55% of the operating cost (excluding investment cost) of transport per passenger by June 30, 1995. To help achieve this and other targets, the Government will carry out a study of public transport demand, cost, affordability, and tariffs in Almaty, Karaganda, and Shymkent. The study, to be completed by March 31, 1995, will in particular be aimed at formulating guidelines on when and how full cost recovery could be reached in the medium to long term. As an interim measure, the Government will increase passenger fares so as to cover 25% of the operating cost of transport per passenger (excluding investment cost) when half of the buses financed under the World Bank financed urban transport project are put into operation in each city.

4. The system of exemptions or lower fares for special groups will be reviewed and, if necessary, revised so that special fares are limited to the most needy groups and no one else. The collection of fares will also be improved and a more effective control system put in place. For these purposes, a study will be carried out before March 31, 1995, and measures taken as shown necessary by the study before June 30, 1995.

Subsidies

5. Government policy is that the Companies will be provided in a timely fashion with funds sufficient to operate under reasonable technical standards and minimum acceptable levels of quality of service. To this end, local organs of power have been authorized to levy special taxes for the purpose of funding urban transport.

6. Funds will be allocated monthly to the Companies on the basis of their operating and investments budgets. The operating budgets will be prepared and approved each year on the basis of the actual costs, adjusted monthly to take account of inflation, of agreed levels of quality of service taking account of agreed improvements in efficiency (for example, through improved maintenance, reduction of fuel consumption, and reduction of personnel). Improved targets of performance for the Companies are attached to this PSAP (Attachment 1). The investment budgets will be prepared and approved each year on the basis of an agreed strategy for improvement and renewal of the Companies' fleet and equipment as necessary under reasonable standards to maintain or improve the levels of quality of service. For these purposes, the Companies will review by December 31, 1994, the methodologies and procedures for preparation of their operating and capital budgets. The local governments will also review by December 31, 1994, the procedures for submission and analysis of subsidy requests. Decisions will be taken soon thereafter so that an adequate subsidy system can be used starting on March 31, 1995.

Governance of the Urban Passenger Transport Companies and Contractual Relationships between the Companies and the Government

7. The policy of the Government is that the Companies will be autonomous and free to take all their decisions regarding organization and carrying out of operations and maintenance, purchases of spare parts, supplies and materials, financial transactions, and personnel matters (under strategies and guidelines defined by the Companies' owners, the local governments). There will be a detailed charter establishing the main responsibilities of the Companies, the principles under which they operate and their general organization. There will also be a detailed contract between the local governments and senior management of the Companies setting up the objectives of the Companies in terms of service (particularly routes and frequencies) and efficiency. There will also be similar contracts between the senior managers of the Companies and the managers of the depots. Achievement of the objectives will be measured through agreed indicators and target values, and part of the salary of the senior and depot managers will depend on their results.

8. The Companies' legal status and their existing charters and contracts will also be revised to reflect the above policies, take account of the changes in the legal structure in Kazakhstan (especially the laws and regulations regarding the corporatization of public enterprises), include measurable objectives, and streamline the Companies' reporting requirements and operational supervision procedures. In parallel, the capability of the local governments to supervise the Companies will be improved. For these purposes, a study will be carried out before March 31,

1995 and decisions taken as soon as possible thereafter on an improved system of governance and contractual relationships so that adequate charters and contracts can be used on a pilot basis between June and December 1995, and effectively starting on January 1, 1996.

Competition and Private Provision of Public Transport Services

9. The policy of the Government is to promote efficient competition in the provision of urban passenger transport services and to encourage the growth of alternative suppliers of such services. Any person or company willing to provide any type of service will therefore be authorized to do so, provided that it meets national standards regarding safety and pollution and can show evidence of a minimum level of professional capability. There will not be any other restrictive rule, and tariffs will be set freely by the providers of the services. For these purposes, the Government will review by March 31, 1995, its licensing standards and procedures and its relevant regulations, and, on this basis, take decision by June 30, 1995, on necessary improvements. In addition, the Government will prepare by June 30, 1995, suitable measures for the competitive tendering of public transport. Such tendering will be implemented on a pilot basis on at least two routes in Almaty, Karaganda, and Shymkent before December 31, 1995.

**Policy Statement and Active Plan for
Improving Public Transport Services in Almaty,
Karaganda, and Shmkent**

**Performance Targets for Public Transport Companies
of Almaty, Karaganda, and Shmkent**

Performance Indicator ^a	Target	
	June 1995	June 1996
1. Passengers carried per operating vehicle/day		
Autobus:		
Almaty	1,200	1,200
Karaganda	1,350	1,350
Shmkent	1,200	1,200
Trolleybus:		
Almaty, Shmkent	1,000	1,000
2. Km per operating vehicle/day:		
Autobus	220	240
Trolleybus	190	220
3. Availability: vehicles in service as a percentage of total fleet:		
Autobus	70	80
Trolleybus	80	90
4. Average number of breakdowns as a percentage of buses/trolleybuses in operation each day	12	10
5. Staff employed per vehicle (bus, (trolleybus, and tram)^b:	4	4

a/ Urban services only.

b/ Includes administrative, maintenance and operational staff.

REPUBLIC OF KAZAKHSTAN
URBAN TRANSPORT PROJECT

**Number of Urban Passengers Transported Annually
in Almaty, Karaganda, and Shimkent
(Million Passengers)**

City	Mode	1985	1989	1990	1991	1992	% Modal Split	% Decrease 1990-1992
Almaty	Autobus	392.8	485.3	476.9	438.1	343.8	78.5	28
	Trolleybus	69.8	98.1	101.9	84.6	67.3	15.3	34
	Tram	42.1	47.0	48.6	37.4	26.5	6.2	45
	Total	504.7	630.4	627.4	560.1	437.6		30
Karaganda	Autobus	226.9	266.2	253.2	251.9	231.7	97.0	10
	Trolleybus	10.5	9.5	10.0	8.7	5.5	2.3	45
	Tram	0	4.0	4.3	3.1	1.6	0.7	63
	Total	237.4	279.7	267.5	263.7	238.8		12
Shimkent	Autobus	127.9	122.7	114.5	101.0	59.9	73.9	47
	Trolleybus	17.2	25.9	27.6	25.2	30.3	26.1	(10)
	Total	145.1	148.6	142.1	126.2	90.2		27

Source: Public Transport Companies of Almaty, Karaganda, and Shimkent; April 1993.

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1993 Vehicle Fleets in Almaty, Karaganda, and Shimkent

City and Mode	Total Number of Vehicles	Age				No. of Kilometers ('000)		
		0-3	4-6	7-9	10+	0-250	250-500	500+
Almaty								
Autobus	1707	500	442	462	303	681	983	43
Trolleybus	385	63	150	120	52	111	241	33
Trams	183	36	30	75	42	66	90	27
Karaganda								
Autobus	655	95	319	197	44	111	402	142
Trolleybus	68	45	10	5	8	49	19	
Trams	12				12	1	8	5
Shimkent								
Autobus	362	107	86	104	65	109	160	93
Trolleybus	97	23	19	15	40	27	33	37

Source: Public Transport Companies of Almaty, Karaganda, and Shimkent; April 1993.

REPUBLIC OF KAZAKHSTAN**URBAN TRANSPORT PROJECT****Availability of the Vehicle Fleets in Almaty
Karaganda, and Shimkent (April 1993)**

	Total Fleet	Not Repairable	Waiting for Spare Parts	Under Short Repairs	Available Fleets	% Fleet Availability
Almaty						
Autobus	1,707	205	225	155	1,122	65.7
(of which Ikarus)	(250)	(25)	(75)	(25)	(125)	50.0
Trolleybus	385		61	37	287	74.5
Tramway	183		61	58	64	35.0
Karaganda						
Autobus	817	39	158	110	510	62.4
(of which Ikarus)	(194)		(77)	(12)	(105)	54.1
Shimkent						
Autobus	362		129	38	195	53.6
(of which Ikarus)	(155)		(75)	(21)	(59)	38.0

Note: Data for Almaty and Karaganda include charter buses normally not used for public transport.

Source: Public Transport Companies of Almaty, Karaganda, and Shimkent; April 1993.

REPUBLIC OF KAZAKHSTAN
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Key Performance Indicators (1992)

	% Fleet Availability	Passenger/ Operating Vehicle/ Day	Km/ Operating Vehicle/ Day	% Daily Break- down*
Almaty				
Autobus	66	1,532	195	15
Trolleybus	74	962	175	
Tramway	35	1,562	176	
Karaganda				
Autobus	62	1,662	223	10-15
Shimkent				
Autobus	54	1,470	190	15
Trolleybus		1,786	161	
Satisfactory Values (World Bank 1986 Urban Transport Policy Study)	80-90	1,000-1,200	230-260	8-10

* As a percentage of operating fleet.

Source: Public Transport Companies of Almaty, Karaganda, and Shimkent; April 1993.

REPUBLIC OF KAZAKHSTAN

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**Estimate of Spare Parts and Supplies Needs
(June 1993)**

1. The project companies have prepared detailed lists of spare parts and supplies for rehabilitation of their fleet of Icarus buses and trolleybuses. These lists are based on the condition of the individual vehicles and the companies' review of their past consumption of spare parts and supplies for these vehicles. The objective is (i) to put back in operation the vehicles that have been stopped, sometimes for many months, for lack of spare parts and supplies and (ii) to rehabilitate the vehicles which are now in operation when major breakdowns occur to the engine and the transmission. It is estimated that all vehicles in the concerned fleets will need major repairs in the coming eighteen months.

2. The lists of spare parts and supplies were reviewed by a World Bank-financed consultant in June 1993. The draft results of his review are summarized below:

**Needs for Spare Parts and Supplies
(US\$000)**

	For Vehicles Currently Stopped	For Vehicles Still in Operation	For Current Repairs	Total
Almaty				
Autobuses	285	1,885	280	2,450
Trolleybuses	300	1,200		1,500
Karaganda				
Autobuses	215	1,385	270	1,870
Shimkent				
Autobuses	205	1,465	250	1,920
Trolleybuses	160	200		360
Total	1,165	6,135	800	8,100

REPUBLIC OF KAZAKHSTAN

URBAN TRANSPORT PROJECT

**Program of Study Tours, Seminars and Consultancy Services
for Implementing Policy Reforms and Strengthening
Institutions in the Urban Transport Sector**

I. Background and Main Objectives

A main objective of the project is to implement a statement of policies and action plan for urban transport which will be agreed by central and local governments in Kazakhstan. These policies (which concern tariff levels and fare collection, subsidies, introduction of contractual relationships between the companies and the local governments, and promotion of competition) are aimed at creating an environment which encourages a more efficient provision of urban transport services. Another main objective of the loan is to assist the public transport companies in the three project cities to modernize and improve the organization, management, and work practices, in line with the experience gained in other countries. The provision of services described below will help achieve these objectives. With the exception of the assistance funded by the EC, the services will be provided by one urban transport consulting firm to be recruited by Government.

II. Description of the Services

The assistance to be provided under this one contract includes:

- a) modernization of urban passenger transport policies and organization (this would be financed by an EC grant and is not included in the project);
- b) analysis of public transport demand, cost, affordability, and tariffs;
- c) improvements in the system of fare exemption and in the collection of fares;
- d) establishment of transparent procedures for allocation of subsidies to urban transport companies;
- e) improvements in the charters of the project companies and their contractual relationships with the city and oblast governments;
- f) formulation and implementation of measures to encourage the provision of urban public transport services by the private sector;
- g) improvement in organization and management of vehicle maintenance;

- h) improvement in organization and management of public transport operations;
- i) improvement in budget preparation and cost accounting procedures; and
- j) general assessment of computer needs.

These services are described in detail below.

A. Modernization of Urban Passenger Transport Policies and Organization

1. **Objective.** To inform central and local government officials and managers of urban transport companies of the lessons of experience and modern practices in urban transport and formulate recommendations on how to implement such practices in Kazakhstan.

2. Main Tasks

a) Study Trips

- (i) The consultants will organize a program of visits and seminars for two groups of about twenty persons each to two European cities. The cities and the public transport companies to be visited will be selected for the efficiency of their transport systems and the innovative solutions developed in the past. The two cities will be in different countries. One will be of a size not less than that of Almaty, the other will be smaller. There will be two identical trips with an interval of about two months in order to keep the groups to a manageable size and maximize the chance for participation by high level Kazakh officials and managers.
- (ii) The main subjects to be discussed will be the following:
 - Roles of central and local governments in urban transport;
 - Governance of public transport enterprises, contractual relationships between the companies and the government, performance assessment;
 - Tariff and subsidy policies, their implementation in the control of government/enterprise contractual relationships, generations and revenues for subsidies;
 - Actual and potential role of the private sector, innovative approaches and their implementation;

- **Urban transport planning;**
- **General organization and management of public transport companies;**
- **Maintenance policies and implementation, quality control;**
- **Organization of operations, planning and implementation;**
- **Financial aspects including especially budgeting, cost accounting and auditing;**
- **Investment planning;**
- **Procurement of spare parts, supplies, and new equipment, quality control, stock management; and**
- **Use of computers.**

(iii) **The seminars and field trips will be designed to give to the participants an overview of the main issues, lessons of experience, and best practices today in urban transport in Europe. The emphasis will be on (i) urban transport policies and ways and means of implementation and (ii) enterprise organization and management and the incentive and control systems to minimize costs for a given level of service. The main urban transport modes to be considered will be urban buses, trolley buses, and, to a lesser extent, tramways. Very little attention will be devoted to metros and suburban railways.**

(iv) **The seminars will include well prepared presentations with extensive use of audiovisual and distribution of written materials in Russian. Although only two cities will be visited for practical reasons, interesting solutions developed in other cities will also be presented.**

b) Diagnostic Missions

After return of the groups to Kazakhstan and on the basis of requests solicited during the study tour, various specialists from the consulting firm will visit some of the cities and public transport companies represented in the tour. They will help formulate solutions to the companies' most pressing problems, in particular through the use of the modern practices studied during the trip.

B. Analysis of Public Transport Demand, Cost, Affordability and Tariffs

1. **Objectives.** To provide the economic background for local governments to review their public transport fare policies. To formulate guidelines on when and how full cost recovery could be reached.

2. Main Tasks

- a) Analyze the factors that determine public transport demand, in particular city density and structure, housing mobility, private car ownership, availability of non-motorized public transport, quality of service, and tariffs. Explain in particular the reasons for the recent drop in public transport patronage in the project cities.
- b) Assess the costs of public transport in the project cities, including recurrent and investment costs.
- c) Analyze available data on family income and expenditures in the project cities and assess what proportion of their revenues families at various income levels can afford to spend on public transport.
- d) On the basis of these analyses, assess the implications on the general public of implementing a full cost recovery policy in the project cities. Explain in particular the advantages and disadvantages of such a policy. Ensure that the assessment is consistent with the recommendations prepared in section C below of these terms of reference. Also ensure that the implications on private sector development are fully taken into account.
- e) Prepare a brief overview of the public transport fare policies in other countries of the world which could be relevant to Kazakhstan.
- f) Prepare recommendations for consideration of the local governments on when and how full cost recovery could be achieved.

C. Improvements in the System of Fare Exemptions and in the Collection of Fares

1. **Objectives.** To revise the system of fare exemptions so as to limit exemptions and reduced fares for special groups to only the most needy groups. To revise fare collection procedures and methods of control so as to limit to the greatest possible extent the number of passengers who do not pay.

2. Main Tasks

- a) Review the system of fare exemptions and reduced fares in each of the project cities and compare them with the systems used in various other countries.
- b) Examine the rationale for fare exemptions and reduced fares and identify the cases where this rationale may be weak, in particular because it may not be consistent with the central government's social policies or because the objectives may be achieved more effectively by other means.
- c) Prepare recommendations on how to reform and simplify the system, including proposals for implementation (possibly by stages).
- d) Review the procedures for collecting fares from the passengers and for controlling that payments are duly made and compare them with the procedures generally used in other (especially western) countries.
- e) On the basis of the analysis in part d) and taking account of the specific characteristics of transport demand and vehicle fleet in the three project cities, prepare recommendations on how to improve fare collection including proposals for implementation (possibly by stages).
- f) Assist the local governments and public transport companies in each of the project cities implement the measures that they have taken after review of the consultant's proposals.

D. Establishment of Transparent Procedures for Allocation of Subsidies to Urban Transport Companies

1. **Objective.** To establish a system for allocation of the subsidy from local governments to their public transport companies that provides sufficient funds for normal operations and investments and promotes improvements in productivity.

2. Main Tasks

- a) Review the existing systems for subsidy allocation in the three cities with special attention to their results in 1993.
- b) Discuss with the local governments and transport companies the advantages and disadvantages of systems currently employed in various other countries.
- c) On the basis of comments received, develop a system which is:
 - (i) based on actual costs;

- (ii) coordinated with improved computerized procedures for budget preparation;
 - (iii) to the greatest possible extent, based on existing information so as to require no additional data collection; and
 - (iv) takes into account targets for improvements in productivity.
- d) Develop procedures and schedules for preparation of subsidy requests and for their review and approval by local governments in coordination with local budget approval procedures.
 - e) Develop procedures for regular accounting and reporting particularly designed to ensure that subsidy funds are expended only on urban transport in the city providing the funds.

E. Improvements in the Charters of the Project Companies and their Contractual Relationships with the City and Oblast Governments

1. **Objective.** To develop charters and contracts for the project companies which will provide for autonomous companies with clearly defined relationships with the local governments, measurement of performance, and accountability.

2. **Main Tasks**

- a) Review the charters of the operating companies in the three cities, as well as the various contracts between the local Governments, the companies' senior managers, and the depot managers. Compare them with the charters and contracts in use in successful urban transport organizations in other countries.
- b) Develop proposed charters for each of the operating companies and discuss them with the officials of the companies and of the local governments; the charters will clearly set forth the main responsibilities of the operating companies, the principles under which they operate and their general organization. In particular, the charters should ensure that the operating companies are free to take under strategies and guidelines defined by their owners, the local governments, all decisions regarding their organization, operations, maintenance, purchase of spare parts and materials, financial transactions, and personnel matters.
- c) Formulate detailed contracts between the local governments and the companies' senior managers which set forth the objectives of the companies in terms of service (particularly routes and frequencies) and efficiency, with quantitative targets (including cost reduction) whenever possible. Develop detailed sub-contracts between the companies' senior managers and the managers of the depots.

- d) Formulate a mechanism to link part of the salary of the companies' senior managers and depot managers to the achievement of their objectives.
- e) Develop procedures and schedules for reporting, regular review of the performance of the companies, and updating of the contracts.
- f) Formulate recommendations for strengthening local governments so that they can supervise the companies effectively as established in the charters and contracts.
- g) Ensure that the proposed systems and procedures are consistent with improvements recommended in other studies regarding budget, cost accounting, and allocation of subsidies. Also ensure that the proposals are consistent with existing regulations on the control of state-owned enterprises, as well as new regulations being developed as part of the general technical assistance to the State Property Committee on enterprise reform. In this context, ensure that the public transport companies have a clear legal status (possibly that of Joint Stock Company with the State as sole owner).

F. Formulation and Implementation of Measures to Encourage the Provision of Urban Public Transport Services by the Private Sector

- 1. **Objectives.** To improve licensing standards and procedures and formulate measures to ensure efficient competition in the provision of urban public transport services. To help the Government introduce a system of competitive tendering of public transport.

2. **Main Tasks**

- a) Review existing licensing standards and procedures and compare with those used in countries with the most efficient urban public transport services.
- b) Identify provisions which could be revised, added or deleted so as to facilitate the entry of new qualified suppliers of urban public transport services. The objective should be that any person or company willing to provide any type of public transport service would be authorized to do so as long as it meets national standards regarding safety and pollution and can show the necessary minimum level of professional capability. Recommend, in particular, improvements in organizational arrangements and staffing so that license requests are processed expeditiously and fairly and help Government implement these improvements.
- c) Identify public transport needs that are not being adequately met by existing services and formulate measures to encourage entrepreneurs to provide them.
- d) Formulate a set of minimum regulations as well as monitoring and enforcement mechanisms to ensure that the quality and reliability of public transport service is adequate, the interests of the general urban public are safeguarded, and efficient business practices are maintained.

- e) **Review the country-wide and local regulations and procedures that may be relevant to the competitive tender of public transport routes. Identify potential bidders and analyze their constraints (human resources, equipment, finance, etc.) which may affect their operations.**
- f) **On the basis of the experience of other countries, identify routes that could be tendered and propose implementation measures to do so, with special emphasis on service standards, bidding documents and procedures, and supervision mechanisms.**
- g) **Help Government implement competitive tendering of public transport on at least two routes in each of the project cities.**

G. Improvement in Organization and Management of Vehicle Maintenance

1. **Objective.** To inform the concerned managers of public transport companies in Almaty, Karaganda, and Shimkent of modern practices in developed countries regarding the organization and management of urban bus and electric transport maintenance and recommend how to implement such practices in Kazakhstan.

2. Main Tasks

- a) **Organization of a program of visits and seminars for a group of about 25 technical managers to two cities in developed countries. The cities and the public transport companies to be visited will be selected for the quality of their maintenance management and the innovative solutions that they have successfully implemented. At least one of the cities will be of a size comparable to that of Almaty. The study trip will last about two weeks and include detailed presentations as well as field visits on the following topics:**
 - (i) **General organization of maintenance;**
 - (ii) **Work methods, tools, and equipment;**
 - (iii) **Planning of work, coordination with bus/trolleybus operations, labor rules;**
 - (iv) **Incentive systems for managers and workers; control and supervision;**
 - (v) **Procurement of spare parts and supplies, quality control, management of stocks;**
 - (v) **Management information system, cost accounting; and**
 - (vi) **Training.**

- b) After the return of the group to Kazakhstan, two experts among the main contributors to the study trip will visit the public transport companies. They will help them formulate solutions to their most pressing problems, in particular, through the use of the modern practices studied during the trip.

H. Improvement in Organization and Management of Public Transport Operations

1. **Objective.** To inform concerned managers of public transport companies in Almaty, Karaganda, and Shymkent of modern practices in developed countries regarding the organization and management of urban bus and electric transport operations; formulation of recommendations on how to implement such practices in Kazakhstan.

2. Main Tasks

- a) Organization of a program of visits and seminars for a group of about 25 operations managers to the same cities as for the vehicle maintenance study trip. This trip will also last about two weeks and include detailed presentations, as well as related field visits on the following topics:
 - (i) Network design, planning of operations, optimization studies
 - (ii) Implementation: adaptation to specific daily circumstances, field supervision, control systems
 - (iii) Incentive systems for managers and drivers, control and supervision, labor rules
 - (iv) Management information system
 - (v) Training
- b) After return of the group to Kazakhstan, two experts among the main contributors to the study trip will visit the public transport companies. They will help them formulate solutions to their most pressing problems, in particular through the use of the modern practices studied during the trip.

I. Improvement of Budget Preparation and Cost Accounting Procedures

1. **Objective.** To improve and computerize budget preparation and cost accounting procedures so that they can be used as effective management and supervision tools.

2. Main Tasks

- a) Review procedures currently used in the three cities for recurrent and capital budget preparation and cost accounting. Identify their strengths and weaknesses.

- b) Discuss with the transport companies the advantages and disadvantages of procedures employed in various other (especially western) countries.
- c) On the basis of the companies' comments, develop improved procedures that (i) remain simple and adapted to the current economic transition period, (ii) make it easy to take account of productivity improvements, (iii) provide a basis for subsequent development and sophistication, and (iv) are easy to computerize. These procedures should be well coordinated with the procedures prepared for improving the subsidy system. They should also be decentralized with budget and cost analysis being prepared at depot level before consolidation.
- d) Develop a simple computer program (for example on the basis of spreadsheets) to facilitate budget preparation and analysis and cost calculations. Procure and install computers so as to meet minimum needs.
- e) Formulate recommendations regarding the annual schedule for preparation and approval of the companies' budget and for preparation of reports on budget implementation and on costs. Prepare standard reporting forms for the companies managers and the city governments. The budget schedule and the reporting requirements should be consistent with the schedule and reports proposed for improving the subsidy allocation system and the contractual relationships between the companies and the city governments.

J. General Assessment of Computer Needs

1. **Objective.** To prepare a preliminary computerization plan for each of the project companies and formulate recommendations for its implementation.
2. **Main Tasks**
 - a) Analyze the information requirements of the managers of the companies and of the central and local governments.
 - b) Define briefly the possible outputs, the data input required, the flow of data between the organizational units, and the transactions volumes.
 - c) Discuss the advantages and disadvantages of different data processing frameworks for each company (including the degree of decentralization, the communication methods, the standards, and the potential for use of existing software).
 - d) Develop a preliminary computerization plan for each of the project companies including recommendations on hardware and software and a cost estimate. Recommend a minimum list of hardware and software that could be purchased under World Bank loan financing.
 - e) Formulate recommendations for the staged implementation of the computerization plan.

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Estimated Project Cost
(US\$ million)

Component	Local	Foreign	Total	Percent Foreign	Percent Total
About 300 new buses at \$85,000 per bus plus 10% for initial stock of spare parts and \$1,500 local delivery and reception costs per bus	0.5	28.0	28.5	98.2	67.2
Rehabilitation of existing autobuses and trolleybuses (including cost of spare parts, supplies, labor, equipment, and facilities)					
Autobuses (550 units)	0.4	6.3	6.7	94.0	15.8
trolleybuses (400 units)	0.3	2.0	2.3	86.7	5.5
Training and Technical Assistance					
Training		0.9	0.9	100.0	2.1
Technical Assistance	0.6	1.3	1.9	68.4	4.5
65 man months of local consultants at US\$2,500 per man month (including all costs)	(0.2)		(0.2)		
70 man months of foreign consultants at US\$25,000 per man month (including all costs)	(0.4)	(1.3)	(1.7)		
Workshop Tools and Equipment and Office Equipment	0	0.3	0.3	100.0	0.7
Total Base Cost	1.8	38.8	40.6	95.6	95.8
Price Contingencies ^{a/}	0.1	1.7	1.8	94.4	4.2
Total Project Cost	1.9	40.5	42.4	95.5	100.0

a/ Based on price contingency of 2.8% per year.

Implementation Schedule													
	FY94			FY95				FY96				FY97	
	10 11 12 1993	01 02 03 1994	04 05 06 1994	07 08 09 1994	10 11 12 1994	01 02 03 1995	04 05 06 1995	07 08 09 1995	10 11 12 1995	01 02 03 1996	04 05 06 1996	07 08 09 1996	10 11 12 1996
Negotiations with suppliers for spare parts to be procured under direct contracting procedures			XXX	X									
Calls for bids for spare parts to be procured under international shopping procedures for contracts under \$250,000			XXX										
Call for bids for spare parts to be procured under ICB			XXX	XX									
Evaluation & award of contracts under \$250,000 for spare parts to be procured under international shopping procedures			XXX										
Bid evaluation & contract negotiations for spare parts to be procured under ICB				XX									
Bank review of draft contracts for spare parts to be procured under direct contracting procedures for contracts over US\$250,000			XX	XXX									
Bank review of bid evaluation & draft contracts for spare parts to be procured under ICB				XX									
Award of contracts for spare parts to be procured under direct contracting procedures				XXXXX									
Award of contracts for spare parts to be procured under ICB					X								

Implementation Schedule

	FY94			FY95			FY96			FY97			
	10 11 12 1993	01 02 03 1994	04 05 06 1994	07 08 09 1994	10 11 12 1994	01 02 03 1995	04 05 06 1995	07 08 09 1995	10 11 12 1995	01 02 03 1996	04 05 06 1996	07 08 09 1996	10 11 12 1996
D. Delivery of Spare Parts, Tools & Equipment for Buses & Trailers/Buses				XXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX			
Delivery of spare parts to be processed under international adopting procedures					XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX			
Delivery of spare parts to be processed under direct contracting/procedures					XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX			
Delivery of spare parts to be processed under ICB					XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX			
E. Repair & Rehabilitation of Buses & Trailers/Buses					XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX			
F. Selection of Consultants for Institutional Development, Training & Project Implementation		XXXXXXXXXX											
Preparation of draft letter of invitation & short list of consultants		XXXXXXXXXX											
Bank review of short list			XX	X									
Call for proposals				X									
Evaluation of proposals						XX							
Bank review of evaluation of proposals							X						
Contract negotiations							X						
Bank review of draft contracts							X						
Award of contracts approved by the World Bank							X						

REPUBLIC OF KAZAKHSTAN
URBAN TRANSPORT PROJECT

Details of Procurement

**Table 1: Details of Procurement Arrangements
(US\$ million equivalent)**

Project Element	ICB	Other	NBF	Total Cost
1. <u>Goods</u>				
a) 300 new buses	29.4 (29.3)		0.5 ^a	29.9 (29.3)
b) Spare parts				
For buses:				
proprietary items		5.0 ^b (4.9)		5.0 (4.9)
other items	0.9 ^c (0.9)	0.5 ^d (0.5)		1.4 (1.4)
For trolley buses				
proprietary items		1.3 ^b (1.2)		1.3 (1.2)
other items	0.6 (0.6)			0.6 (0.6)
c) Tools and equipment		0.3 ^d (0.3)		0.3 (0.3)
2. <u>Rehabilitation Services</u>				
a) Auto buses			0.6 ^a	0.6
b) Trolley buses			0.4 ^a	0.4
3. <u>Consulting Services</u>				
a) Technical Assistance & Training		2.1 ^e (2.1)		2.1 (2.1)
b) Inspection of Buses ^f		0.2 (0.2)		0.2 (0.2)
c) Seminars and Study Trips ^f			0.6	0.6
TOTAL	30.9 (30.8)	9.4 (9.2)	2.1	42.4 (40.0)

(a) Largely services in kind (such as labor and workshop facilities) provided by the project companies.

(b) Direct contracting for proprietary items.

(c) Mainly tires.

(d) International shopping expected to be in small contracts less than US\$250,000 each.

(e) Services procured in accordance with World Bank Guidelines for Use of Consultants.

(f) Financed by European Community.

Table 2: Details of Procurement Plan for Bank-financed Components

Component	Cost (US\$ million)	Procurement Method	Bidding Documents Completion	Invitation to Bid Issuance	Bid Submission	Contract Signing	Package Completion
Goods*							
Buses (about 300)	29.9	ICB	3/1/94	4/15/94	6/15/94	8/15/94	8/15/95
Rehabilitation of buses	7.0						
Spare parts and tires ^d	1.5 ^v	ICB	4/15/94	6/1/94	7/15/94	9/1/94	12/1/95
Spare parts	5.0	DC	4/1/94 ^d	5/1/94 ^d	NA	7/1/94	12/1/95
Spare parts	0.5	IS	4/1/94 ^d	5/1/94	6/1/94	7/1/94	7/1/95
Rehabilitation of trolleybuses	1.3						
Spare parts	1.3	DC	4/1/94 ^d	5/1/94 ^d	NA	7/1/94	12/1/95
Tools and equipment for rehabilitation of buses and trolleybuses	0.3	IS	4/1/94 ^d	5/1/94	6/1/94	7/1/94	7/1/95
Total for goods	38.5						

Component	Cost (US\$ million)	Procurement Method	Bidding Documents Completion	Invitation to Bid Issuance	Bid Submission	Contract Signing	Package Completion
Technical Assistance							
Inspection of buses	0.2	Short list	3/15/94	4/15/94	6/1/94	7/15/94	12/1/95
Project implementation ^{a/}	0.3	Short list	--	--	--	6/27/93	12/31/95
Policy improvements, institutional development and training /	1.8	Short list	3/15/94	4/15/94	6/15/94	7/15/94	9/1/96
Total for technical assistance	2.3						
GRAND TOTAL	40.8						

ICB = International competitive bidding
DC = Direct contracting
IS = International shopping

Footnotes

- a/ Multiple contracts for procurement of spare parts for buses and trolleybuses.
- b/ Includes approximately US\$0.6 million for spare parts and tires for rehabilitation of trolleybuses.
- c/ Bidding documents not required but procurement packages identified and submitted to the Bank for approval.
- d/ Start of negotiations directly with suppliers.
- e/ On-going contract.

Details of Procurement of New Urban Buses

1. The new buses will be procured by international competitive bidding carried out in accordance with World Bank Guidelines. Bidders (bus manufacturers) will be carefully screened during post qualification to ensure that bids are accepted only from firms that are well qualified, financially and technically. They will be required to (i) submit with their bids evidence that they have, or have available, financial means to cover the cost of manufacture and delivery of 20% of the buses included in the contract; (ii) furnish audited balance sheets and demonstrate the soundness of their financial position including long-term profitability; (iii) provide with their bids data on previous major sales to establish that they had manufactured 1,000 heavy duty buses similar to those being offered and that they are in service, giving the name, address, and nationality of each major purchaser (20 or more units). They will also provide the date and volume of each order, copies of test certificates of inspection issued by the purchaser, and description and general specifications of the buses sold; and (iv) submit detailed plans for providing spare parts and maintenance support in Kazakhstan.

2. Bidders which provide satisfactory information as described in paragraph 1 above (as confirmed by appropriate checks with previous purchasers from the firm) and offer buses which fully meet the detailed technical specifications, will have their bids evaluated and compared on a simplified life cost basis. Only the most important factors would be considered in the analysis of bids: (i) the initial cost of the bus delivered to the city in Kazakhstan where they are to go into service; (ii) the discounted estimated cost of fuel for eight years of service at 75,000 km per year; and (iii) the discounted estimated cost of spare parts. The fuel cost will be estimated on the basis of a simple and readily replicable test which would determine the fuel consumed in driving 100 km at 60 km per hour on a test track. The amount for fuel costs which would be added to the delivered price of the buses would be determined from the following formula:

$$P_F = p \times \frac{\$75,000}{100} \times C \times F$$

Where

- P_F = Amount of fuel costs to be added to the delivered price of the vehicle
- p = International price per liter of bus diesel fuel on the date of the opening of bids
- C = Liters of fuel consumed in the test
- F = Discount rate of 12% to give present value of a series of eight equal annual costs.

The bidders will carry out the fuel consumption test and submit certified test results with their bids. The test results of the successful bidder will be confirmed by testing a limited number of buses offered for delivery.

3. An initial supply of spare parts will be purchased and delivered along with the buses. The bidders would include in their bid a list of the spare parts that they recommend should be purchased with the buses; the cost would be an estimated 10% of the price of the buses. Bidders

will also give a second list of spare parts representing the estimated annual requirements for eight years. This list will have to be backed up by adequate references. Bidders would be required to guarantee that they would furnish parts on the second list at the same unit prices as on the first list (adjusted in accordance with an agreed upon price index) for five years after award of the contract. The discounted cost of the eight year estimated requirements would be added to the bidders' offer for purposes of bid evaluation after detailed check of the references given by the suppliers.

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**Estimated Disbursement Schedule
(US\$ million)**

IBRD Fiscal Year and Semester	Disbursements	Cumulative Disbursements	Cumulative Percentage
1994			
June 30, 1994	0	0	0
1995			
December 31, 1994	10.5	10.5	26
June 30, 1995	14.0	24.5	61
1996			
December 31, 1995	12.0	36.5	91
June 30, 1996	3.1	39.6	99
1997			
December 31, 1996	0.3	39.9	99
June 30, 1997	0.1	40.0	100

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Supervision Plan

1. The staff input indicated below is in addition to regular supervision needs for the review of progress reports, consultant reports, procurement actions, correspondence, etc. (estimated for this project to require four staff weeks per year).

2. Most of the project will be carried out or supervised by MOT and MOE in Almaty; the majority of the World Bank staff supervision will therefore be carried out there. However, on each of the two staff supervision missions per year at least one mission member will visit the project companies in Karaganda and Shimkent, in addition to those in Almaty.

World Bank Supervision Missions

<u>Approximate Dates</u>	<u>Purpose of Mission</u>	<u>Staff Input (staffweeks)</u>
FY94		
April 1994	Project launch workshop Review of procurement arrangements, schedule, and actions to date	4
	Total for FY94	4
FY95		
July 1994	Review of Vehicle Rehabilitation Plan Initial supervision of technical assistance	8
December 1994	Review operational performance Review use of new buses and implementation of vehicle rehabilitation Discussion of first conclusions of technical assistance and recommended policy measures	10

<u>Approximate Dates</u>	<u>Purpose of Mission</u>	<u>Staff Input (staffweeks)</u>
April 1995	Review implementation of vehicle rehabilitation Review of progress in training and technical assistance and implementation of the PSAP	6
	Total for FY95	24
FY96		
July 1995	Mid-term review of project implementation Review implementation of vehicle rehabilitation Review progress in training and a technical assistance and implementation of the PSAP	6
December 1995	Review operational performance Review implementation of vehicle rehabilitation Review progress in implementation of the PSAP	6
April 1996	Review impact of the PSAP on sector performance	6
	Total for FY96	18
FY97		
December 1996	Final Supervision Mission Review progress in implementation of the PSAP	6
	Total for FY97	6
	Total Staff Input	52

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Selected Documents and Data Available in the Project File

1. **Analysis of issues and constraints regarding the financial organization and management of the public transport companies of Almaty, Karaganda, and Shimkent, William Krause, Consultant, July 1993.**
2. **Back-to-Office Report on financial matters (Mission to Kazakhstan, July 5-15, 1993), William Krause, Consultant, July 1993.**
3. **Analysis of issues and constraints regarding urban public transport operations and vehicle maintenance (3 volumes):**
 - a) **City of Almaty**
 - b) **City of Karaganda**
 - c) **City of Shimkent****SOFRETU Consultants, April 1993.**
4. **Evaluation of Needs for Bus and Trolleybus Spare Parts, Cities of Almaty, Karaganda, and Shimkent, SOFRETU Consultants, June 1993.**
5. **Revised Draft Technical Specifications (for new buses), Booz, Allen, Hamilton Consultants, October 1993.**
6. **Selected data and legal documents received from the project companies and the Ministry of Transport, April and June 1993.**
7. **Implementation Program (decrees and orders of the central government, the governments of Almaty City and Karaganda and Shimkent Oblasts, and the project companies), January 1994.**



The boundaries, colors, designations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.

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- ROADS
- +— RAILROADS
- ⊕ NATIONAL CAPITAL
- ⊙ OBLAST CAPITALS
- SELECTED CITIES
- - - INTERNATIONAL BOUNDARIES
- · · OBLAST BOUNDARIES

