

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

Report No.: 55115

Project Name	Highway III
Region	EUROPE AND CENTRAL ASIA
Sector	Roads and Highways (85%); Public Administration-Transportation (15%)
Project ID	P118023
Borrower(s)	GOVERNMENT OF AZERBAIJAN
	Republic of Azerbaijan Azerbaijan
Implementing Agency	
	Azer Road Service JSC Azerbaijan
Environment Category	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
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1. Country and Sector Background

Country Background

1. **The Republic of Azerbaijan is the largest and most populous country in the South Caucasus, home to 8.9 million people of which 54 percent live in urban areas.** The capital city of Baku's population is about 2.1 million. Per capita income for 2008 was US\$3,830 (Atlas method). Recently, Azerbaijan's economy has grown rapidly due to an oil and gas boom that is expected to last for about 20 years. Azerbaijan's GDP rose at an average annual rate of 17.3 percent during 2001-07.¹ In 2008, the growth was lower but still reached 10.8 percent.

2. **The global economic crisis significantly affected the Europe and Central Asia (ECA) Region.** Azerbaijan has been less affected overall, but still suffered from lower global prices for natural resources when oil prices collapsed in the latter half of 2008; however, prices have recently somewhat recovered. The financial sector has avoided a major crisis, remittances were steady in 2009, and non-oil exports were too small to precipitate a recession. Reduced inflow of oil revenues and lower budget expenditures combined with external factors, contributed to much lower inflation (2.1 percent during nine months of 2009 versus 20.8 percent in 2008) and curtailed pressures for appreciation of the Manat. The crisis reduced Azerbaijan's oil revenues, froze global credit, and depressed economic activity in the region. However, the GDP for 2009 is expected to be around 8.0 percent, despite more pessimistic forecasts due to the 2009 fiscal crisis.

¹ World Development Indicators 2008, World Bank.

3. The Government has an ambitious development agenda. Since independence in 1991, Azerbaijan has aimed to develop natural resources and use hydrocarbon wealth to combat poverty and transform the country into a diversified sustainable market economy. Diversifying the non-oil economy has required improving utilities and infrastructure services, investing in human capital, building a supportive business environment, strengthening public sector management, and expanding the financial sector. Over the last decade, Azerbaijan's efforts, supported by development partners, have begun to yield results. In the World Bank 2010 'Doing Business' Report, Azerbaijan showed the most improvement in business climate among 181 surveyed countries -- now ranking 38 up from a 2008 ranking of 97. Government aims to maintain this progress by improving preparation and implementation of development programs.

4. Infrastructure investments are essential for implementation of Azerbaijan's development agenda. Infrastructure is among the important factors that enable and stimulate economic growth and reduce poverty. Prior to the oil boom, infrastructure investment rates in Azerbaijan were low and the country faced an investment deficit. Investments in non-oil infrastructure were about 4.0 percent less per year than the average among Commonwealth of Independent States (CIS) countries, and about 8.0 percent of annual GDP less than the average transition economy during 1995-2002, according to the 2009 World Bank Country Economic Memorandum for Azerbaijan.² As a result, most of the infrastructure is beyond its useful lifespan of 25-30 years and overall infrastructure quality and reliability remain generally poor. The Government's total budget for 2005-2009 for the road sector was 3.7 billion AZN (about US\$4.5 billion). In the medium term, Government plans to invest over US\$13 billion to develop physical infrastructure networks in the country. The aim is to reduce transportation costs, facilitate regional development within Azerbaijan, and improve goods transit along the main transport corridors (North-South and East-West), a valuable contribution to the national diversification strategy.

The Road Sector

5. Economic growth correlates strongly with road investment. Government support for infrastructure development and roads in particular, emerged from the strong correlation between infrastructure development and economic growth due to Azeri products' increased competitiveness, improved regional integration and rural communities' access to markets and social services such as health and education. Azerbaijan was identified as among countries with the poorest road infrastructure in the region,³ according to a 2006 study examining the impact of road network quality on intraregional trade in ECA. The study suggested that some 75 percent of gains from increased regional trade could be achieved by upgrading road infrastructure in countries with the poorest networks.

6. The public road network length and coverage is sufficient for interregional road transport and international connections with neighboring countries. However, network serviceability needs upgrading. It comprises some 25,000km of roads, of which 4,500km are in the Nagorno-Karabakh and adjacent territories, not now controlled by Azerbaijan, and 2,000km

² Azerbaijan – Country Economic Memorandum, "Staying Focused on Diversification," March 19, 2009 Report No. 44365-AZ.

³ Shepherd, Ben and John S. Wilson, *Road Infrastructure in ECA: Does Network Quality Affect Trade?* 2006.

are in the Nakhchivan Autonomous Republic. Road classification and numbering have been revised.⁴ Four of eight major arterial roads (i.e., ‘M’ Roads) that link Azerbaijan to neighboring countries are expected to become the backbone of the national motorway network:

- Baku-Guba-Russian Border (M1 - 208km)
- Baku-Alat-Yevlakh-Georgian border road (M2 - 503km)
- Alat-Astara-Iranian Border (M3 - 243km)
- Baku-Shamakhi-Yevlakh (M4 - 280km)

7. The road network is structured along one North-South corridor (M1, M3) and two East-West corridors (M2, M4). M1 links Baku to the Russian border and M3 links Baku to Iran. The M2, part of the Great Silk Road, is the main route between Baku and Tbilisi and the Transport Corridor Europe-Caucasus-Asia (TRACECA)⁵ route E-60, a main corridor between Western Europe and China.⁶ The M4 runs from Baku to Shamakhi and merges at Yevlakh into the M2. The World Bank, through the first Highway and Highway II projects, has been supporting the Government in upgrading this network. The proposed Highway III project would continue this assistance and focus on upgrading existing road infrastructure into a motorway grid and on improving motorway grid management.

8. Since 2004, major arterial (M-roads) condition has improved due to significant Government investments and IFI support. However, network condition remains fragile due to the lack of programmed maintenance, vehicle axle overloading, and deteriorating traffic safety. Evaluation of the condition of the rest of the road network is based on limited review; the most recent data were collected in 2002 (Highway II project is financing a 15,000km road network database update, available in 2010).⁷ During 2005-09, total rehabilitation and upgrade investments for major arterial roads was US\$1.5 billion; conditions have deteriorated for the rest of the road network. International Road Federation (IRF) information supports this (see Annex 1). In general, road user operating costs are high and many local roads are still impassable for part of the year blocking access to vital services for rural communities. Poor road conditions result from low-quality construction and materials, and no regular preventive maintenance following road construction or rehabilitation.

9. State budget and IFI loans finance road sector capital investments; the maintenance budget comes from earmarked state funding sources. A Road Fund was reinstated by a presidential decree as of January 1, 2007.⁸ The Fund is referred to as a Special Budget Fund on Roads, administered by the Ministry of Transport (MoT) within approved state budget

⁴ State roads have three classifications: Major arterial roads (M); minor arterial roads (R); and collector and local roads. Eight roads are classified as M-roads, four are transport corridors linking Azerbaijan to neighboring countries

⁵ TRACECA is an international transport program involving the European Union and 14 Member States of the Eastern European, Caucasian and Central Asian region, since 2009, entirely financed by member countries.

⁶ The Bank is supporting Georgian section of the E-60 upgrading from two to four lanes through sequential projects: the First, Second, and Third East-West Highway Improvement Projects.

⁷ Besides financing road assets updates, Highway II project is funding a Road Asset Management System and supports ARS newly established statistical unit in charge of supervising data collection and analysis.

⁸ During 1994-00, the Azerbaijan road sector was financed through a Road Fund from earmarked charges on road users (fuel excise, annual vehicle inspection, vehicle sales, transit taxes) and a turnover tax, abolished in 2001.

expenditures. The Special Budget Fund on Roads accumulates six state budget revenue items.⁹ In 2009, the Fund budget was AZN 145 million, or about US\$180 million; in 2010 it is approved at AZN 170 million or US\$ 210 million. According to legislation, revenues collected in the Road Fund are earmarked for operation and maintenance of arterial, local, and urban roads.

10. Maintenance and repair budget is sufficient for main and local roads. As indicated in Annex 1, the 2009 maintenance and repairs budget for roads is about US\$7,700/km; about US\$24,000/km for arterial roads and US\$5,000/km for local roads.¹⁰ These are substantial sums. A target to rehabilitate the entire road network to a year-round maintainable condition within 10 years is realistic if maintenance funds are managed efficiently¹¹. The proposed project will not focus on maintaining the entire road system, but it will finance technical assistance for developing a strategy on how to operate and maintain the nascent motorway network.¹²

2. Objectives

11. The project development objective (PDO) is “to contribute to a more efficient and safer Baku-Shamakhi road and higher quality road services as part of the general network upgrading to Motorway standards. In addition, the project will provide institutional assistance to the Road Administration for management of the nascent Motorway network”.

12. For road users, the project would provide improved road quality and serviceability by providing a modernized motorway environment, including adequate safety features, interchanges, signage, rest stops and other standard features associated with a modern motorway network.

13. For the Ministries of Transport and Finance, the project would establish a framework for development and management of the motorway network. This would include a sustainable road infrastructure-financing scheme that embraces user-pay principles. At project Mid-Term Review it is anticipated that the Ministries of Transport and Finance will have reviewed options for motorway framework financing and selected one for implementation.

14. For ARS, the project would help testing the introduction of a Motorway Management Unit. The Unit would oversee motorway operations, specific investments, the operation and maintenance strategy, and maintain motorway-level standards for users. This Unit would help ARS separate motorway network management from that of other roads. Strengthening the ARS

⁹ Annual Road Tax, based on vehicle engine capacity; passenger transportation and vehicle loads; excise, applied to imported cars; customs applied to imported motor transports entering Azerbaijan, state fees, annual vehicle technical inspection; state fees for international car transports transiting through Azerbaijan.

¹⁰ The Cabinet of Ministers prepares the principles of spending the Road Fund money for road classes, which is approved by the President. Now roughly 50 percent of all Road Fund revenue is allocated to maintain arterial roads. Of the other 50 percent, 75 percent is for local roads, and 25 percent for urban roads. ARS selects the detailed geographic, road segment, and work-type distribution of maintenance funds.

¹¹ Timely application of less expensive surface dressings or asphalt overlays not only conserves budget but also is less disruptive to traffic. Road reconstruction costs five times as much per kilometer as overlay, and 25 times as much as bituminous surface dressing. Allowing roads to deteriorate to the emergency repair stage is a very expensive road management practice.

¹² Under Highway II, technical assistance for Road Asset Management is on-going.

by creating a motorway-dedicated unit could boost resource efficiency and focus on road-user oriented services. The project would finance the initial costs of establishing a small ARS team that could evolve into a Motorway Management Unit (MMU), if successful. In the medium term, this MMU would manage a modern Motorway network including sound road operation approaches, maintenance budgeting, planning, programming, and implementation. However, after consultation with Azeri counterparts, it was agreed that such reform could take time and that a “bottom-up” approach should be implemented. Therefore, the project foresees only the preparation of the reform, via support to a small unit at the ARS to learn and test motorway network management.

15. **Key Indicators.** Project performance would be measured against several qualitative assessments and quantitative indicators. Indicators would be monitored and evaluated regularly by MOF, MOT, ARS and the Project Implementation Unit (PIU). They align with the indicators already in place under the Highway II project. They include:

Project Outcome Indicators

- Efficiency: Reduced road user costs from Baku to Shamakhi;
- Safety: Reduced Fatality Rate per 100-million vehicle-km along the Baku Shamakhi road; and
- Quality: Increased percentage of M Roads in Good and Fair Condition as a share of total M network roads.

Intermediate Outcome Indicators

- Increased number of km upgraded for Baku – Shamakhi;
- Percentage of safety audits conducted on road accidents recorded during construction stage of Baku - Shamakhi;
- Development of a Motorway Operations Manual; and
- Study and development of contracting, financing, and institutional arrangements for the investments, management, and maintenance of motorways.

16. **The development of the country’s road network supports the Government’s agenda to diversify its economy and stimulate non oil growth by improving access to markets and promoting regional development.** Diversification of the economy is at the core of the CPS (FY07-10) which is under implementation. The CPS rests on four pillars – (i) improving the quality and transparency of public sector governance, (ii) supporting sustainable and balanced growth of the non-oil economy, (iii) increasing the quality and access to social services and (iv) improving environment. The CPS emphasizes that, “Significant investment in infrastructure and transit corridors will be needed to develop Azerbaijan’s non-oil growth potential.” In this post financial crisis environment, one of Azerbaijan’s key priority is to stimulate non-oil export growth. This will require:

- The design of a sustainable fiscal framework;
- Improvement in the business environment and preparation of strategies to attract investors;
- A sustained investment in human skills;
- The implementation of regional development and inclusive growth.

17. **The project would spur economic development in the Shamakhi region**, bringing Shamakhi to about one hour drive from the capital with safe transport, and provide an improved connection to the East – West Highway which connects Baku to Tbilisi and to the Black Sea ports.

3. Rationale for Bank Involvement

18. **Developing transport corridors to motorway standards is key to Azerbaijan’s non-oil growth.** Motorway development will enhance connectivity between regions within Azerbaijan, and potential to command main trade routes between the Central Asian Republics and the Far East on one side, and Europe and Western World on the other. The 2001 Highway project and the 2005 Highway II project began Bank support for road network development. Those projects provided a platform for the Bank and the Government to address the need to improve the road network as well as the sector’s institutions, incentives, policies, and culture. The Highway III project will allow the sector policy dialogue to move one step further by addressing issues specific to the motorway network.

19. **Bank engagement in the transport sector is the longest and the deepest among the donors.** Other International Financial Institutions (IFIs) are also active; ADB is financing 132km of roads at M2 and M3; EBRD is financing 102km of roads at M1 and M2; and the Islamic Development Bank is financing 103km of roads at M2. Government road investments have focused on developing the motorway network and, through implementing these projects, it has reached the point of needing improved formulation of motorway design, operation and maintenance strategy. The Bank, through Highway III, would be best positioned to support the Government in the next stage in its road development.

4. Description

20. **Component 1¹³: Upgrading a 100km section of the M4 road Baku-Shamakhi into four-lane motorway and related road safety activities (US\$293 million without VAT).** This component comprises civil works for the Baku-Shamakhi road and consultancy services for supervision of works. It also finances road safety activities to be implemented throughout the project implementation (i.e., during design, construction and opening of new four-lane road). Government would finance land acquisition and resettlement costs. Included in this component are also consultancies for the supervision and technical audit of works and design of priority investments for rehabilitation and upgrade of the main road network.

21. **Component 2: Providing technical assistance, training, and institutional development for ARS and MoT in motorway operations and maintenance (US\$5 million without VAT).** The component will finance the development of a sustainable funding policy, an efficient

¹³ The cofinancing percentage will be IBRD/IDA 80 percent and Government 20 percent of the project costs without VAT and other taxes. The Government will be responsible for the VAT and other taxes and the 20 percent. The project costs including VAT are: Component 1:US\$345.7 million, Component 2: US\$5.9 million and Component 3: US\$1.18 million.

mechanism to allocate resources and a mechanism to ensure delivery of quality motorway services. Assistance will be two-fold: first, activities implemented directly at the MoT to explore options for a renewed funding policy and efficient resource allocation (US\$1 million); and second, activities implemented by ARS to test operations and maintenance mechanisms to ensure delivery of quality motorway services (US\$4 million). Included in this component are also training, study tours on motorway administration for MoT, ARS and government officials from other agencies.

22. Component 3: Project Implementation (US\$1 million without VAT). The project will fund consultant services, equipment and TA to support project implementation at the MoT, ARS and the PIU, including office equipment, software, training (especially for financial management), seminars, financial management TA, and project financial audits.

5. Financing

Source:	(\$m.)
BORROWER/RECIPIENT	114
International Bank for Reconstruction and Development	169
International Development Association (IDA)	70
Total	353

6. Implementation

ARS and the MoT have extensive experience with World Bank-financed operations. The Project will be implemented by MoT through ARS. The PIU at ARS is staffed with seasoned local consultants. In 2010, and before project effectiveness, two international consultants will be hired (financed by the Highway II project); one will help the PIU with daily operations and implementation of technical assistance, and the second will help ARS with policy, implementation of the Road Asset Management System, and sharing international best practice tailored to Azerbaijan. The MoT will be monitoring the work of ARS and PIU, while at the same time leading one sub-component of the project (the study on financing arrangements under component 2).

23. For procurement and disbursement, the project implementation will rely on the existing PIU setup. The PIU, in charge of procurement and disbursement, will remain under the direct authority of ARS.

24. Overall project monitoring will remain with MoT through ARS. Technical assistance financed under project component 2 will also be managed by MoT and ARS, with assistance from international consultant based in Baku during the assignment, to test setting up a small Motorway Management Unit at ARS. The MoT -- the owner of the infrastructure and the policy maker -- will focus on the financing and planning mechanism to be put in place for a sound operation and maintenance of the motorway. The ARS -- the agency in charge of running the network -- will test a pilot program that will involve the setup of a Motorway Management Unit. Both institutions will monitor the progress on those fronts during implementation. The MoT will be leading the dialogue with the Bank and will make sure that progress, as well as difficulties,

are recorded during implementation. As for ARS, they will remain fully in charge of the supervision of the component 1 (civil works) and the setup and management of the Motorway Management Unit throughout the implementation of the project.

7. Sustainability

25. The capital investment financed under the project is part of the draft Government Program for Rehabilitation and Development of Azerbaijan’s Republic Highways (2006-2015), still to be approved. While the Program has not been formally adopted, the Government’s road investments and overall policy toward the sector have been in line with the Program since 2006. The Government is committed to develop a 1,000km motorway network by 2015. Activities financed under Component II will help Government design a financing plan for operation and maintenance of the motorway network. Financing and its application for maintaining the country road network as a whole is beyond project scope, but would comprise general Bank dialogue on public expenditure. Nevertheless, the Bank would assist with maintenance practice modernization by helping implement three maintenance unit pilots under Highway II as a follow-up to the EBRD Corporate Plan study.¹⁴

8. Lessons Learned from Past Operations in the Country/Sector

Readiness of civil works is critical: Bank experience with its highway portfolio in general, and Azerbaijan in particular, shows that Borrower satisfaction and the project successful implementation depend on disbursements beginning soon after project effectiveness. So far, under Highway II, disbursements have been slow, albeit now improving. First, some unforeseen technical issues developed during project preparation; and second, the client experienced difficulties complying with Bank safeguards for land acquisition. The Highway III project is not expected to encounter those difficulties. Procurement will be completed by project effectiveness for about US\$70 million in civil works for the first 30km road section near Baku. Second, road improvements are within the right-of-way; no land acquisition is required for the first section, and land acquisition for subsequent sections is expected to be implemented faster because MoT and MoF are now familiar with applying the newly established Expropriation Law. Third, the project provides for retroactive financing to avoid delays in implementation due to project processing and approval schedules. Preparation of the detailed design for the rest of the project has started, and the project road will be designed in sections so more time can be devoted to technically complex Shamakhi bypass section, without delaying the rest of the civil works.

26. *Technical assistance design should aim to ensure ownership, and TA should not include too many activities.* The Highway II project has yet to complete substantial technical assistance activities, which focus on the road sector in general, address overarching issues and provide comprehensive support (i.e., preparing new road laws, road data systems, etc). Technical assistance for the proposed project is focused on developing and managing the nascent motorway network in Azerbaijan, which will comprise 10 percent of the total paved road network when fully developed. Some consultant studies will provide the client with recommendations and options on how to operate and maintain the motorway network. The client supports and understands these studies and a few well-defined technical assistance activities that are tailored to local capacity.

¹⁴ In Highway II, there is a consultancy for the development of service agreements for maintenance.

27. **Project technical difficulties should align with local capacity.** The project requires one road segment to be expanded from two to four lanes. The Bank is involved in rehabilitating the existing two lanes through Highway II and is familiar with technical, geographical, and safeguards issues. Project scope and size conforms to ARS and PIU ability and track record to implement.

28. **Standards for evaluating transport performance should evolve.** Rising personal incomes and rapidly changing markets generate demand for increased transport services variety and quality to a level that is above what is usually available in most developing and transitional economies. Priority is increasingly attached to moving people rather than vehicles, ensuring greater transport safety, fewer adverse health effects, greater attention to amenities and aesthetic issues, and fewer adverse impacts on the environment and ecology resulting from improperly designed and executed transport development strategies.

29. **Rising vehicle ownership calls for more road infrastructure capacity.** While car ownership is still low at 69 vehicles per 1,000 inhabitants¹⁵, it is increasing rapidly and traffic growth potential is substantial, a trend that should gain momentum following strong GDP growth and a burgeoning middle class that will continue to seek to vehicle ownership. Most cities, and Baku in particular, are major engines of growth in Azerbaijan. Rapidly expanding urban populations need for transportation within cities and between cities. The project is financing infrastructure capacity increase between the capital and a major city/region that could be reached within a one-hour drive when construction is completed.

9. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	[X]	[]
Natural Habitats (OP/BP 4.04)	[]	[X]
Pest Management (OP 4.09)	[]	[X]
Physical Cultural Resources (OP/BP 4.11)	[]	[X]
Involuntary Resettlement (OP/BP 4.12)	[X]	[]
Indigenous Peoples (OP/BP 4.10)	[]	[X]
Forests (OP/BP 4.36)	[]	[X]
Safety of Dams (OP/BP 4.37)	[]	[X]
Projects in Disputed Areas (OP/BP 7.60)*	[]	[X]
Projects on International Waterways (OP/BP 7.50)	[]	[X]

10. Contact point

¹⁵ Actual car ownership is probably higher than the official figure –probably in the range of 150 vehicles per 1,000 inhabitants in 2009. The official 69/1,000 vehicle per 1,000 inhabitant figure is below worldwide average of 100/1,000 vehicle per inhabitant and far below the 466/1,000 average of EU 27 countries and 307/1,000 average of new EU countries (lowest ratio Romania with 167/1,000).

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

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