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Report No: 32223 - PE

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF US$ 50 MILLION

TO THE

REPUBLIC OF PERU

FOR A

REGIONAL TRANSPORT DECENTRALIZATION PROJECT

JUNE 15, 2005

Finance, Private Sector and Infrastructure Department
Country Management Unit – LCC6C
Latin America and the Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective June 1, 2005)

Currency Unit = Peruvian Nuevo Sol
3.25 PEN = US$1
US$ = SDR 1

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AADT	Average Annual Daily Traffic
CAF	*Corporación Andina de Fomento* (Andean Coorporation for Development)
CAS	Country Assistance Strategy
CND	*Consejo Nacional de Descentralización* (National Decentralization Council)
CTAR	*Consejos Transitorios de Administración Regional* (Transition Councils of Regional Administration)
DGASA	*Dirección General de Asuntos Sociales y Ambientales* (General Directorate for Environmental and Social Affairs)
ERR	Economic Rate of Return
FIDA	*Fondo de Inversión de Ancash* (Ancash Investment Fund)
FIDE	*Fondo Intergubernamental de Descentralización* (Intergovernmental Fund for Decentralization)
FMR	Financial Monitoring Report
FONCOR	*Fondo de Compensación Regional* (Regional Compensation Fund)
GDP	Gross Domestic Product
GoP	Government of Peru
HDM	Highway Development and Management (model)
IDB	Inter-American Development Bank
MTC	*Ministerio de Transporte y Comunicaciones* (Ministry of Transport and Communication)
NMT	Non-Motorized Transport
NPV	Net Present Value
PCDR	*Plan de Concertación para el Desarrollo Regional* (Participatory Regional Development Plan)
PNCAT	*Plan Nacional de Capacitación y Asistencia Técnica* (Technical Assistance Plan and Training for Local and Regional Governments)
PRI	Provincial Roads' Institute
PRRP	Participatory Regional Roads Plan
QAT	Quality Assurance Team
RED	Roads Economic Decision (model)
RIMU	Regional Infrastructure Management Unit
RRD	Regional Road Directorate
SIAF	*Sistema Integral de Administración Financiera* (Finance Administration Integral System)
SIL	Sector Investment Loan
SNIP	*Sistema Nacional de Inversión Pública* (National System of Public Investment)
TORs	Terms of Reference
vpd	Vehicles per day

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PERU

REGIONAL TRANSPORT DECENTRALIZATION

PROJECT APPRAISAL DOCUMENT

LATIN AMERICA AND CARIBBEAN

LCSFT

Date: June 7, 2005	Team Leader: Aurelio Menendez/Nicolas Peltier-Thiberge
Country Director: Marcelo Giugale Sector Director: Makhtar Diop Sector Manager/Director: Jose-Luis Irigoyen	Sectors: Roads and highways (50%); General public administration sector (30%); General transportation sector (20%) Themes: Decentralization (P);Rural services and infrastructure (S);Other trade and integration (S)
Project ID: P078813 Lending Instrument: Specific Investment Loan	Environmental screening category: B Safeguard screening category: Limited impact

Project Financing Data

[X] Loan [ ] Credit [ ] Grant [ ] Guarantee [ ] Other:

For Loans/Credits/Others:
Total Bank financing (US$m.): 50.00
Proposed terms: FSL

Financing Plan (US$m)

Source	Local	Foreign	Total
BORROWER	100.00	0.00	100.00
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT	30.00	20.00	50.00
INTER-AMERICAN DEVELOPMENT BANK	30.00	20.00	50.00
Total:	160.00	40.00	200.00

Borrower:
Republic of Peru

Responsible Agency:
PROVIAS Departamental, Ministerio de Transportes y Comunicaciones
Angel Escobar Guardia, Gerente de Promoción y Transferencia
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Estimated disbursements (Bank FY/US$m)									
FY	2006	2007	2008	2009					
Annual	8.5	12.5	16	13					
Cumulative	8.5	21	37	50					

Project implementation period: Start June 1, 2005 End: December 31, 2009
Expected effectiveness date: December 1, 2005
Expected closing date: June 30, 2010

Does the project depart from the CAS in content or other significant respects?	[ ]Yes [X] No
Does the project require any exceptions from Bank policies?	[ ]Yes [X] No
Have these been approved by Bank management?	[ ]Yes [ ] No
Is approval for any policy exception sought from the Board?	[ ]Yes [X] No
Does the project include any critical risks rated "substantial" or "high"?	[X]Yes [ ] No
Does the project meet the Regional criteria for readiness for implementation?	[X]Yes [ ] No

Project development objective

The project development objective is to improve – through decentralization at the regional level – the prioritization, efficiency and effectiveness of regional transport interventions and, hence, their contribution to regional development and policy reduction in Peru.

Project description

1. Preparation of participatory regional road plans: This component will support the preparation of participatory regional road plans – aligned with the existing regional development plans- and elaborate a diagnosis of the sector in a particular region, analyze the supply and demand for transport infrastructure, and prioritize and evaluate road investment options. The component will also finance the various feasibility and technical studies for the road segments prioritized through participatory planning.

2. Upgrading of regional roads: This component will finance the rehabilitation of about 2,200 km of regional roads prioritized through participatory planning under the previous component and the periodic maintenance of about 2,700 km of regional roads rehabilitated by Provias Rural and transferred to regional governments, as well as the related supervision.

3. Routine maintenance of regional roads: This component will finance the routine maintenance and the related supervision of the 4,906 km of regional roads receiving rehabilitation or periodic maintenance under the previous component. Maintenance will be performed by micro-enterprises with the exception of some mechanized maintenance activities (*perfilados*).

4. Institutional capacity building: This component – to be managed centrally by *Provias Departamental* (PVD) – is aiming at providing the technical assistance needed to upgrade regional governments' institutional capacity, and to help the restructuring of PVD in the new context of decentralization.

Which safeguard policies are triggered, if any?
Environmental Assessment
Cultural property
Involuntary resettlement
Indigenous peoples

Significant, non-standard conditions, if any, for:
Board presentation: None
Loan/credit effectiveness: Preparation and endorsement of the operational manual in terms and scope acceptable to the Bank. Covenants applicable to project implementation: Covenants: (a) PVD should furnish to the Bank no later than 6 months after the effective date, the contract appointing the independent auditors under TORs and with qualifications and experience satisfactory to the Bank. (b) PVD should furnish to the Bank, no later than 6 months after the effective date, a Ministerial resolution, in form and substance satisfactory to the Bank, for the creation of the Multi-Sector Advisory Committee. (c) PVD should furnish to the Bank, no later than 18 months after the effective date, the relevant and applicable legal framework for hierarchy of roads and the technical norms for the rehabilitation of gravel roads. Conditions of disbursements for allocation to participating regions: For disbursement in one region, PVD shall furnish to the Bank a report confirming that the respective Framework Agreement, Financing Agreement, Annual Operation Plan, Participatory Regional Roads Plan (PRRP) and Institutional Agreement have been prepared and approved.

PERU
Regional Transport Decentralization

CONTENTS

A. STRATEGIC CONTEXT AND RATIONALE

1. Country and Sector Issues

The Peruvian Decentralization Reforms

For the last three years, the Government of Peru (GoP) has brought forward an ambitious decentralization agenda, with the effective transfer of responsibilities at both the regional and local levels, along with an increase in budgetary resources and in institutional capacity. Since 2002, major laws—the "*Ley de Bases de la Descentralización*" and the "*Ley Orgánica de los Gobiernos Regionales*" are two of the most salient—have been enacted. At the regional level, regional governments have been elected through democratic suffrage, consolidating a "three tier" governmental structure with the municipalities (called districts in rural areas and provinces in urban areas) at the local level, the regions at the regional level and the central government. Through decentralization at the regional level, the GoP aims more particularly at strengthening the competitiveness of Peru's regions (see Box). Accordingly, an increasing amount of responsibilities have been transferred to regional governments and municipalities. The health and the road sectors have received particular attention from the Peruvian Government to implement its decentralization agenda, although other social and infrastructures sectors (water/sanitation, electricity) are also high in this agenda. The choice of roads is justified by significant international evidence showing that roads constitute one of the sectors where the benefits of decentralization are the most obvious in the short term (with, therefore, possible demonstrative effects).

In parallel to the political decentralization process, progress has also been achieved in the area of fiscal decentralization. Transfers to regional governments increased dramatically in 2003, amounting to about 14% of overall public expenditures that same year. They increased to 16% of overall public expenditures in the executed budget for 2004 and they remain stable at that level, with about US$2.2 billion, in the approved budget for 2005. However, about two thirds of these resources are tied to the payment of public employees and related social obligations, reducing significantly the capacity of the regions to invest in capital expenditures: resources for capital investment only amounted to US$131 million in 2003 though they have been raised to US$249 million in the 2005 budget. About a quarter of these capital expenditures (US$32 million in 2003) were spent in road investments (rehabilitation or improvement).

Box: Decentralization and the Competitiveness of the Peruvian Regions

The ultimate goal of regional governments is the sustainable development of the regions through the promotion of public and private investments, as well as job creations; and ensuring full rights and access to equal opportunities for regional populations, in agreement with national, regional and local development plans (art. 4).

The objective of each regional government is to ensure a strategic management of the region's competitiveness. To this end, regional governments promote innovation and partnerships between the public and the private sectors; they encourage cooperation initiatives between firms, social institutions and organizations, as well as the development of productive activities; and they facilitate the emergence of opportunities to create economic development corridors, market expansion and exports (art. 8).

Source: Regional Governments Basic Law (*Ley orgánica de gobiernos regionales*), 2002.

Positive results have already been obtained with a better participation of local and regional stakeholders in the management of larger share of public resources. This participation is particularly formalized through the preparation of participatory plans and budgets. Within its decentralization agenda, the Government's strategy seeks to instill the appropriate participatory approach for the selection of public investment at the local and regional level. The planning process involves local and regional stakeholders in the definition of a development strategy which is then used to prioritize among possible alternatives for public investment. Participatory Regional Development Plans (PCDRs) and their equivalent for the local level are detailing these strategies. In the PCDRs, infrastructure projects-and in particular roads- are seen as mechanisms for increasing the opportunities of the various regions to advance their competitiveness and integrate markets across neighboring departments. To date, 26 PCDRs have been approved—though not all of them are of the same quality and scope.

However, while the legal framework is now largely in place, significant institutional and fiscal challenges still need to be addressed. The decentralization laws that have been in place since 2002 have clarified the respective responsibilities of the various levels of government. Nevertheless, the institutional and budgetary consequences have not been fully drawn yet: a significant part of the budgetary transfer to local or regional governments remain tied to commitments decided by the central governments (salaries in particular), some central agencies still intervene directly in sectors that are now the responsibility of regional governments, and, in many sectors like regional roads, education or agriculture, the old deconcentrated public agencies are not yet fully integrated in the organization of the corresponding sub-national government (although the decentralization laws give these sub-national governments that authority). Institutional restructuring and a comprehensive capacity building program are therefore needed at all levels of government in order for the decentralization process to bring its full benefits in terms of efficiency and effectiveness.

Decentralization in the Road Sector

Peru presents a major "road gap": the low availability and poor quality of transport infrastructure is constraining mobility, increasing logistic costs and ultimately constitutes a bottleneck to competitiveness and broad-based economic growth. The road density (2.9 km per 1,000 people or 0.06 km per km^2) is among the lowest in South America and, according to the 2002 Global Competitiveness Report, firms rank Peru 54 out of 75 countries (10 out of 17 in Latin America) for road quality. Major funding is required to bring the Peruvian transport infrastructure to the level of regional and income comparator countries. Capital investments required to restore Peru's road network, at all levels, to conditions aligned with traffic levels have been estimated at around US$4.2 billion. [1]

The regional road network (about 14,300 km, of which less than 3,000 km are considered in good or regular shape) constitute the connection between and across the rural road network (47,000 km) and the national roads (17,000 km). As such, it plays a critical role to develop

[1] *Sources:* Guerra-García, G. (2000) – *Hacia una Política de Financiamento para el Sector Transportes en Perú* Mimeo prepared for the Inter-American Development Bank (IDB); and Banco Central de Perú (2004) – *Desarrollo de la Infraestructura de Transporte con Utilización Intensiva de Mano de Obra*, study directed by Mr. Silva Ruete, published by the Perú World Bank Office.

regional markets and to link small and mid-size cities to larger economic centers. Capital investments required to restore Peru's regional road network to conditions aligned with traffic levels have been estimated at US$1.3 billion, with about 80% of the network needing rehabilitation or improvement. In addition, current needs for regional roads' maintenance amount to US$31 million annually but they could reach US$60 million if the entire secondary network were rehabilitated. In comparison, existing resources to improve and maintain regional roads amount to about US$85 million for capital expenditures and US$8 million for maintenance.

Table: Peru's Road Network and Levels of Government Responsible for its Management.

Road network	Corresponding roads	Length (km)	Levels of government in charge
primary	National roads	16,980	Central Government (MTC)
secondary	Regional roads (*departamentales* in Spanish)	14,250	24 Regional Governments (one for each *departamento*)
tertiary	Rural roads (*caminos rurales* in Spanish)	46,970	Municipalities (1,812 districts and 194 provinces)

Source: MTC (2004).

The decentralization reforms are already well advanced for rural roads whose management is now successfully handled at the provincial level in at least 12 *departamentos*. Since 2002, major progress has been achieved in the 12 poorest Peruvian *departamentos* in terms of building capacity for an efficient management at the provincial level [2] of the rural road network. The on-going Second Rural Road Program has helped to build a sustainable institutional capacity at the provincial level, with the creation of an increasing number of Provincial Road Institutes (38 PRIs had been created as of March 2005). These fully decentralized entities are placed, in each province, under the authority of a "Board" (whose members are the mayors of the provincial and district municipalities) and are responsible for the maintenance of the rural roads rehabilitated with the support of the central government (through its agency Provias Rural). Routine maintenance is performed by micro-enterprises, allowing to create an entrepreneurial capacity among poor rural communities. After two years of experience (the first pilot was created in Arequipa), the PRIs have proved to constitute a sustainable institutional framework, ensuring both true ownership and accountability at the local level, and an effective and efficient management of rural road infrastructures.

In the short term, a major challenge will be to strengthen the capacity of the regions to efficiently manage the secondary road network, while building on existing successful experiences from the rural roads program and the modernization reforms being pursued by the central government. The disappearance of the former deconcentrated regional entities and the transfer of the responsibility for the regional road networks from the central Ministry of Transport and Communications (MTC) to the regional governments has led to a confused institutional framework. Currently, responsibilities on transport matters—regulation, traffic safety, road asset management—at the regional level are split between the (smaller) Regional Infrastructure Management Units (RIMUs) and the (larger) Regional Road Directorates (RRDs),

[2] Peru counts with 194 provinces (provincial municipalities, mostly urban) and 1,812 districts (district municipalities, mostly rural). In each province, there are several districts but the provincial mayor has no authority over district mayors.

with the latter often still reporting and functioning as a dependent unit of the MTC. [3] At the same time, MTC's *Provias Departamental* (PVD) continues undertaking activities—largely by force account—on the regional road network (with about 2,400 workers and 500 pieces of heavy equipment—of which only half is operational). The transfer of expertise and the capacity-building of regional governments offer a unique opportunity to re-think the force account approach and rationalize road management activities.

In sum, the strategy will need to properly address the following key issues: (1) the poor conditions of the secondary road network which constrain mobility and ultimately the regions' competitiveness and their ability to reduce poverty; (2) insufficient financial capacity of the regional governments to finance the rehabilitation and maintenance of the secondary road network (although it falls under their responsibility since 2002); (3) the low institutional capacity of these regional governments to perform these rehabilitation and maintenance activities in an efficient manner; and (4) the need to clarify and restructure the institutional framework and the responsibilities [4] at both the regional and central levels in the new context of decentralization. While the existing legal framework is generally clear enough to describe the respective responsibilities of the various levels of government, a few specific issues (eg. regulation of transport services and road safety) still need clarification. The proposed project will contribute to address these issues through a combination of investments, which would not take place in its absence, and a comprehensive technical assistance program be design to help regional governments strengthen their capacities, reengineer their organizations, and develop their normative and administrative procedures, lest the decentralization process will prove fruitless in achieving higher efficiencies and better levels of economic development and poverty reduction.

The decentralization process is an opportunity to revamp the way road investments are planned, implemented and maintained, thus ultimately contributing to a better performance of the public sector. Participatory planning – with the preparation of participatory regional and provincial road plans closely coordinated with the PCDRs and the local development plans – can help prioritize among road investments and better align them with local needs. In addition, the transfer of responsibilities from the central to the regional and local levels, along with the corresponding institutional restructuring, is an opportunity to rethink the way road management activities are performed. This means in particular, a greater participation of the private sector and a phasing out of the old "force account" model in which certain road management tasks like maintenance are performed in house in a very inefficient way. Finally, the transfer of responsibilities and corresponding budgetary resources is an occasion to reassess the needs for an efficient and effective road assets' management and compare them with the level of the intergovernmental transfers and of the financial capacity of the lower levels of governments which become in charge.

A successful decentralization of regional road responsibilities to regional governments would strengthen the whole decentralization process and prepare the ground for similar approaches in other sectors. The process will strengthen the regional institutional capacity and help demonstrate that regions can successfully handle new responsibilities in the infrastructure

[3] Due to the recent creation of the regional governments, similar duplication of responsibilities between the new decentralized institutions and the old deconcentrated ones may well exist for other sectors.
[4] Including those related to the regulation of transport services and to road safety.

sectors. This could for example benefit to the on-going process to transfer rural electrification responsibilities at the regional level, which has been planned for the coming two years. Similarly, progress achieved for rural roads at the municipal level create a favorable environment to implement a decentralized rural infrastructure strategy, integrating the various infrastructure sectors (water/sanitation, roads, rural electrification, rural telecommunication). [5]

2. Rationale for Bank Involvement

To confront these issues, the GoP is very interested in finding new approaches to transport management at the regional level. For this purpose, the Government has established a Multisector Commission, consisting of representatives of institutions competent either in transport or in decentralization policies (including the Ministry of Economy and Finance (MEF), the National Commission of Decentralization (CND), the Ministry of Transport and Communications (MTC), and the current entity in charge of regional roads (the PVD)), and the delineation in a coordinated fashion of the action plan to transition away from the centralized approach to regional road management and investment decision-making. The MEF, the CND and the MTC see the Bank (and the IDB) as a source of analytical knowledge to contribute at the sectoral level with the reform process and to further increase regional government managerial and technical capacity in the road sector. As independent external financiers with a reputation for insisting on sound asset management, the Bank and the IDB can help introduce good management practices on the regional road network. In this endeavor, the Government also sees the Bank as a third party that can bring together the key actors at the national and regional levels. In this effort, as building in the successful experience of the Rural Roads Program and Lima Transport Project, the Government has requested a joint operation with the IDB.

3. Higher Level Objectives to which the Project Contributes

The project is aligned with the Country Assistance Strategy (CAS) objectives and would build on past or on-going Bank interventions in decentralization and transport. One of the main priorities of Peru's Country Assistance Strategy for 2003-2006 is public sector management and decentralization. While cautioning against the possible risks associated with decentralization, the CAS stresses that a well-conceived decentralization policy could make a significant contribution to improving public sector performance, if accompanied with clear transfers of responsibilities and development of local management capacity. The latest CAS progress report, discussed by the Board of Executive Directors on December 7, 2004, cautioned that "inadequate physical infrastructure" was a significant bottleneck which "could hold back growth in the medium term" and supported the Government's plan to "consolidate the far-reaching reforms in fiscal decentralization and social service delivery by building capacity in sub-national governments". In this respect, this project builds extensively on the decentralization reforms implemented under the Programmatic Decentralization and Competitiveness Structural Adjustment Loan.

The proposed project aims at ensuring a sustainable and successful transfer of expertise to the newly-created regional governments to efficiently manage the regional road network. To do so, it will build on the technical and methodological experience gained in implementing rural road management (First and Second Rural Roads Projects) and transferring it to the municipal levels.

[5] A draft of such a strategy has been proposed by the World Bank to the GoP.

The project will also strengthen the decentralization process and increase its impact on public sector management and on local development. As demonstrated at the municipal level by the Second Rural Roads Project, the road sector is a good starting point to operationalize the decentralization process and empower regional and local governments. The proposed project could prepare the ground for increased involvement of regional governments in other infrastructure sectors as envisioned in the decentralization agenda of the Government of Peru.

B. PROJECT DESCRIPTION

1. Lending Instrument

The proposed lending instrument is a Specific Investment Loan (SIL).

Despite a learning focus of the project, a Learning and Innovation Loan (LIL) is not considered an appropriate instrument because of its small size and limited potential impact. An Adaptable Program Loan (APL) has not been deemed appropriate at this time due to our recent engagement in the regional transport sub-sector in Peru and the need to build up its knowledge and institutional base.

2. Project Development Objective and Key Indicators

The project development objective is to improve—through decentralization at the regional level—the prioritization, efficiency and effectiveness of regional transport interventions and, hence, their contribution to regional development and poverty reduction in Peru. These features refer to:

- *prioritization*: better aligning transport investments to local needs as identified by participatory regional development plans and appropriate planning and evaluation tools;
- *efficiency*: strengthening the institutional framework in order to achieve the appropriate management of transport interventions at the regional level, with due consideration to environmental and social issues, including issues related to the Indigenous Peoples of Peru; and
- *effectiveness*: upgrading the quality of regional transport infrastructures and developing sustainable maintenance mechanisms to improve regional mobility which can ultimately foster growth and reduce poverty.

The project's design takes place in the context of the decentralization agenda in Peru. In this respect, one of the key policy reforms to be pursued is the establishment of institutional frameworks in the participating regions to make a clearer link between investment and maintenance interventions and the related resource needs, encouraging incentives through the contributions from the central level (including those from the project) towards better resource mobilization and appropriate road asset management practices.

Project outcomes will be measured by the increase in the use and quality of regional transport infrastructure (see Annex 3 for indicators). The institutional outcomes will be measured by the

mainstreaming of the decentralized approach to regional road management, namely (a) the preparation of the participatory regional road plans; (b) a more efficient regional road asset management with a greater participation of the private sector; (c) the restructuring of the existing institutional framework (in particular with the suppression of duplication between the Regional Infrastructure Management Unit, RIMUs and the Regional Road Directorate, RRDs); and (d) the downsizing of the central agency Provias Departamental and its evolution towards a regulatory body, supervising and facilitating the implementation of the decentralization process.

3. Project Components

The project will include five components, each moving at a different pace depending on the participating region.

Component 1: Preparation of participatory regional road planning (estimated cost US$10.9 million of which US$5.45 million would be financed by the Bank Loan). This component will finance the preparation of participatory regional road plans—aligned with the existing regional development plans—and elaborate a diagnosis of the sector in a particular region, analyze the supply and demand for transport services and infrastructure, and prioritize and evaluate road investment options, towards identifying the sub-project priorities that could be funded under the project (sub-component 1-A). A prioritizing methodology, [6] including a combination of both economic potential and poverty level criteria, has been prepared as part of project preparation, with due attention to environmental and social issues. The preparation of these plans will be handled by the planning units of the regional governments, with the technical assistance of consultants. *Provias Departamental* will facilitate the process (eg. organize coordination event) and monitor the preparation of the plans. Ultimately, plans have to be formally approved by the regional council or by a competent commission of the regional government. Thirteen participatory regional road plans have been initiated and – in certain cases – finalized, as part of project preparation. This component will help finalize these plans in every eligible region, by financing the related costs (organization of participatory planning, training of the planning units, dissemination and coordination costs, updating or revision of certain plans). As part of project preparation, a significant number of these plans have been either completed (6 of them as of March 2005) or should be completed by August 2005 (at least 7 additional ones). The component will finance the completion of all the plans and the updating of, at least, the first ones (plans are expected to be revised every 4 to 5 years). It will also finance the various feasibility and technical studies for the road segments prioritized through participatory planning (sub-component 1-B).

Component 2: Upgrading of regional roads (estimated cost US$138.83 million of which US$34.71 million would be financed by the Bank Loan). The objective of this component is to rehabilitate about 2,200 km of regional roads prioritized through participatory planning (under component 1) and to perform the periodic maintenance of 2,706 km of regional roads rehabilitated by another agency of MTC (*Provias Rural*) and transferred to regional governments. Some regional roads which have been rehabilitated early on may also need periodic maintenance before the end of the project and such activities would also be eligible under this component. About a third of the secondary network would be upgraded as a result of

[6] *Metodología para la formulación, evaluación y actualización de los planes viales participativos.*

this component and the ultimate development impact is expected to be high since the road segments to be upgraded would be selected according to their relevance for regional development. Regional governments would contract private enterprises to perform the rehabilitation works and engineering consultants to carry out the relevant supervision, with the technical support and oversight of the PVD. The related upgrading tasks will contribute to skilled and unskilled employment generation in the regions. None of the works to be undertaken under this component will require resettlement or imply major impacts to the natural environment. As part of project preparation, 8 road segments (532 km) have been identified and feasibility and technical studies have been prepared. The rehabilitation of these 8 roads as well as some periodic maintenance activities will therefore be able to start shortly after the expected date of Board approval. A clause for retroactive financing has been introduced in the Loan Agreement so that these expenditures can be taken into account.

Component 3: Routine maintenance of regional roads (estimated cost US$26.12 million of which US$3.39 million would be financed by the Bank Loan). This component would finance the routine maintenance - and the related supervision - of the 4,900 km of regional roads rehabilitated (or having received periodic maintenance) under the previous component. In addition, it would finance specific road maintenance interventions (annual mechanized maintenance also called *perfilado* in Spanish) performed once a year right after the rainy season. Building on the successful experience of the Rural Roads projects I and II, maintenance would be performed by mechanisms similar to the micro-enterprise model. The *perfilados* could be performed under force-account but the amount to be reimbursed by the project would be fixed per kilometer (about US$600 per km and per year plus inflation) and subject to a maximum of US$8.8 million. These activities are expected to generate unskilled employment opportunities that could benefit to the rural poor. Particular attention will be paid to ensuring the sustainability of the model (i.e., that sufficient funding is dedicated by regional governments to maintenance and that micro-enterprises are adequately contracted to perform such maintenance). These activities will follow environmentally sensitive approaches, following current practices in Peru and other Latin American countries. This component will benefit from the experience of the 2,706 km of roads transferred by Provias Rural (all of them are currently maintained by micro-enterprises).

Component 4: Institutional capacity building (estimated cost US$17.14 million of which US$5.95 million would be financed by the Bank Loan). This component—to be managed centrally by PVD—is aiming at providing the technical assistance needed to upgrade regional governments' institutional capacity and will be built upon comprehensive institutional assessments performed during project preparation (as part of project preparation, comprehensive institutional assessments have been prepared in 8 "fast track" regions.). Activities under this component include: (a) the rationalization of the current institutional framework and in particular the restructuring (possibly merging) of the RRDs (formerly with the Ministry of Transportation and Communication) and the RIMUs, newly-created as part of the organizational structure of the regional governments; (b) supporting a transition from direct administration of road maintenance/rehabilitation to contracting it to the private sector; (c) training in safeguards management; (d) clarification and assignment of regulatory responsibilities (for instance those related to the regulation of transport services and to road safety); (e) actions for the restructuring

of the PVD; [7] and (f) monitoring, auditing and evaluation. Resources (up to a total of US$200,000) have been allocated as well for possible studies related to the management of the regional road network in the context of national transport policies and programs, complementing other existing resources that focus on overall transport policy formulation. [8] Eligible expenditures for this component will include technical assistance, studies and evaluations, as well as training, dissemination and coordination costs. This component will include two different types of activities: sub-component 4-A (institutional strengthening of regional governments) and sub-component 4-B (institutional strengthening of PVD).

Component 5: Project administration (estimated cost US$6 million to be financed exclusively from national counterpart funds). The costs related to project administration by PVD would fall under this component.

4. Lessons Learned and Reflected in the Project Design

The design of the proposed program builds on the following lessons from other initiatives in Peru [9] or other countries:

a) **Participatory planning allows identifying the investment which is the best tailored to local needs –** the preparation of the regional road plans will ensure that local stakeholders' needs are fully reflected in the prioritization of investment alternatives. There is large international evidence supporting a decentralized approach to road planning and showing that local users know better than central agencies what infrastructure need to be improved in order to fit their needs and complement in the most efficient way other existing or planned development programs.

b) **Road infrastructure investment are key to the competitiveness agenda and, therefore, they should be prioritized in order to develop economic opportunities –** improvement of tertiary roads' conditions under Peru's second rural road program has halved transport time and reduced transport costs by a third. In addition to improving access to basic services (education, health), this has had a tremendous impact on the productivity of rural economies and on enhancing access to local markets. Peru's development plans and strategies [10] as well as the local participatory development plans give a significant importance to transport infrastructure as a key instrument to foster a more balanced economic growth and improve the competitiveness of the Peruvian regions and territories. For that reason, the methodology proposed by this project to prioritize among territories and investment alternatives emphasizes economic potential criteria (e.g. agricultural or mining production, tourism frequentation).

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[7] The component will help design and implement the restructuring process of PVD which has been agreed upon at negotiations.

[8] For example, IDB resources within its Third National Road Project.

[9] In particular the Programmatic Decentralization and Competitiveness Structural Adjustment Loan (SAL), the Second Rural Roads Project and the Rural Infrastructure Strategy.

[10] Such as the *National Strategy for Poverty Reduction and the Development of Economic Opportunities for the Poor*, the *National Plan for Territorial Development*, the *Sierra Rural Development Strategy* and the *Plan for the Sustainable Development of the Amazonian Region.*

c) **Decentralization works when it is gradually implemented along with the transfer of sufficient technical and management expertise as well as budgetary resources** – experience from the decentralization reforms in other countries and from Peru with the rural roads' project have shown that the transfer of new responsibilities to sub-national governments is successful when it is performed on a timely basis along with the transfer of corresponding budgetary resources and the building of institutional capacity. For that reason, the proposed project includes (1) eligibility conditions establishing the commitment of the regions to the project's objectives; (2) securing sufficient funding for road maintenance in regional governments' budgets; and (3) institutional building of the regions with the restructuring of the RRDs and RIMUs and the reform of the new unit.

d) **Road construction, rehabilitation and maintenance is more efficiently performed by private operators than by public agencies** – international experience shows that a more efficient framework for road management can be created when transport ministries and public agencies evolve towards a regulatory role in which they set up the overall framework for road management (ie. planning, regulation, standards, etc.) while the actual implementation is contracted to private operators. In Peru, the tertiary road network is managed in such a way while the primary and secondary networks are still largely managed under a "force account" model. The proposed project aims at taking advantage of the transfer of responsibilities to the regions for secondary network management, to change the existing model, with outsourcing of rehabilitation and maintenance activities to private operators.

e) **The use of micro-enterprises for road maintenance has proved to be successful in creating an entrepreneurial capacity in rural Peru** – the second rural road project (but also similar initiatives in other countries such as Colombia, Bolivia or Honduras) has shown that micro-enterprises can perform routine road maintenance in an efficient way, while creating employment opportunities for the rural poor (men and women). The proposed project aims at scaling up this model, building on the successful piloting experience of Provias Rural with 2,706 km of regional roads.

5. Alternatives Considered and Reasons for Rejection

Alternative interventions and approaches that have been considered for the project include:

a) **National implementation with consultations at the regional level.** This alternative would have implied the strengthening of the central PVD for the implementation of the project, weakening the main thrust of the project of developing the capacity at the regional level. From a risk analysis point of view, this alternative would have been less risky and would have included a more controlled strategy. The selected alternative would retain from this alternative the oversight capacity of the central entity but would delegate project implementation to the regional governments. To further minimize the risks, the selected alternative requires a major effort during the preparation process of defining for the starting regions the appropriate organization framework and the transition to that framework. The Multi-sector Commission has expressed its full support of this strategy.

b) **Other transport investments (e.g., airports, ports).** Although these were at times mentioned as important components of regional infrastructure, increasing the menu of transport sub-sectors (and *a fortiori* other infrastructure sectors) would make the project very complex while increasing the resources needed to achieve an effective impact. Consideration will be given however to river transport facilities (wharfs) when waterways are the main mode of transport. Indeed, river-based transport, in particular in the "*Selva*", constitutes often a more "eco-efficient" solution than land-based alternatives.

c) **Intervention in a limited number of regions.** This alternative would have implied selecting a few regions, based on socio-economic criteria or institutional readiness. It would have facilitated implementation but would have weakened the overall decentralization process by refusing *a priori* access to certain regions. In addition, the relatively limited number of *departamentos* (24 of which 21 have a significant secondary road network) remains manageable (compared to the 114 provinces and 488 districts where Provias Rural has been active).

C. IMPLEMENTATION

1. Institutional and Implementation Arrangements

At the national level, the overall responsibility for project implementation and coordination will rest within Provias Departamental (PVD). During preparation, an agreement was reached on the number and qualifications of staff that PVD should have to efficiently manage the program. Regional governments will be in charge of the preparation of the participatory regional road plans (component 1) and the implementation of the eligible investments under components 2 and 3, with technical assistance which the PVD will be responsible for carrying out (component 4). In addition, this unit within PVD will be responsible for the project's overall monitoring and evaluation and for promoting coordination across regions.

The decentralization process implies that Provias Departamental evolves from an executing agency to a regulatory/promoting/supervising body. Within the institutional capacity building component, resources are allocated in order to support this strategic evolution (sub-component 4-B). The initial steps are well underway, with the expected downsizing of the *unidades zonales* and the phasing out of construction or rehabilitation activities as specified in the restructuring plan agreed upon at negotiations and signed by the Transport Vice-Minister. This evolution will be gradually carried out to ensure adequate project implementation, and reports will be furnished every six months to the Bank and to the IDB until full implementation of the restructuring plan.

The Multisector Commission which has been set to supervise the preparation of the project and ensure coordination between the various relevant ministries and agencies has proved to be an efficient coordination mechanism. During implementation, this Multisector Commission will be replaced by a Multisector Advisory Committee which will act as a high level coordination body and supervise project's implementation. This Committee will include one or two members representing the regional governments. A dated covenant has been introduced to ensure that this Committee will be created in the 6 months following effectiveness.

Strong coordination will be ensured with the MEF: first, through participation in the Multisector Advisory Committee, second, through participation in most – if not all - of preparation and supervision missions, and, third, through the overall economic analysis of the project, performed under the framework of the National System of Public Investment (SNIP in Spanish).

Coordination will also be ensured between PVD and the other relevant departments of the MTC. In particular, PVD will closely interact with Provias Rural in order to benefit from its extensive experience in decentralization of rural roads at the municipal level. PVD will also coordinate with Provias Nacional to ensure that the strategies developed for the primary and the secondary road network is consistent. Finally will also closely interact with other MTC departments on specific issues such as road classification and hierarchy (Office of Planning and Budgeting), heavy equipments' stock (General Directorate of Roads and Railways) and social and environmental policies (General Directorate for Environmental and Social Affairs or DGASA in Spanish).

Within each region, the overall responsibility for project implementation will rest with the regional government. For component 1, the preparation of the participatory regional road plans will be performed by the planning unit of the regional government with the technical assistance of PVD. For components 2 and 3, a specific unit will be designated within the regional government's organizational structure to handle project implementation. In most of the regions, it is expected that this unit will be the RIMU or a unit within the RIMU. The designation of this unit and the commitment to rationalize the institutional structure in order to avoid duplication between RIMUs and RRDs, is part of the requirement for regional governments in order to be eligible to components 2 and 3. This unit will receive technical assistance and institutional capacity building support from PVD as part of component 4.

Table: Proposed Institutional and Implementation Arrangements

Component	Responsibilities of PVD	Responsibilities of Regional Governments
1. Participatory planning	Coordinate, monitor and provide technical assistance to planning process	The planning units of the regional governments prepare the participatory regional road plans, according to agreed standards and methodologies. Feasibility and technical studies are contracted by regional governments with guidance from PVD
2. Road upgrading 3. Road maintenance	Monitor implementation progress and consistency with agreed standards and methodologies Facilitate coordination across regions	A unit to be designated by each regional government implement (contracting, supervision) the participatory regional road plans, according to agreed standards and methodologies
4. Institutional strengthening	Coordinate and implement the institutional strengthening package designed to build capacity at the regional level Commit to implement the institutional restructuring plan agreed upon at negotiations. Make best use of technical assistance received for that purpose.	Express needs and make best use of the technical assistance received Commit to implement the related institutional strategies (restructuring, phasing out of "force account" approaches)

Eligibility of the regions and conditions for disbursement. All the regions with a regional road network in need of rehabilitation and which have signed with PVD a framework agreement (*convenio marco*) describing the overall project's principles will be eligible to component 1-A. For expenditures related to the upgrading or maintenance of a particular road segment (ie. technical or feasibility studies under component 1-B, rehabilitation or periodic maintenance activities under component 2 or routine maintenance under component 3), a framework agreement, a financing agreement (*convenio de financiamento*) must have been signed between PVD and the regional government. In addition, an annual operation plan (*plan operativo annual*) and a participatory regional road plan including the corresponding road segment must have been approved by the regional government. For expenditures related to the institutional strengthening component (sub-component 4-A), a framework agreement and an institutional framework (*convenio institucional*) must have been signed between PVD and the regional government. When initiating disbursement in a particular region, PVD will furnish to the Bank a report confirming that the respective agreements have been prepared and approved.

Allocation of budget resources. Project's resources for road rehabilitation are pre-assigned between the regions based on a methodology developed during project preparation (see Box).

Box: Methodology to Allocate Budgetary Resources Across Regions.

Budgetary resources to rehabilitate about 1,900 km of secondary roads will be pre-assigned between regions based on good conditions' regional road density per capita, on road conditions and on the financial capacity of the regions to bring counterpart funds. The resources corresponding to the remaining 300 km and the allocation of the regions which would not comply with project's requirements will be put in a "competitive fund" (*fondo concursable*) to be allocated in priority to the regions which have been the most efficient in implementing the program and the related institutional reforms. This methodology for allocating resources has been designed with the objectives of (1) improving the availability of good conditions' transport infrastructure as measured by the density of roads relative to the population; (2) ensuring an efficient management of the secondary network as measured but the proportion of the regional network in good conditions in each region; and (3) taking into account the financial capacity of regional governments. In addition, the "competitive fund" provides an additional incentive for regional governments to implement the necessary institutional reforms and the investment program, according to the project's principles.

Schedule of project implementation. The project will require a significant start-up period to fully develop in each eligible region, including (a) the preparation of the participatory regional road plans; (b) the fulfillment by regional governments of the conditions required to receive funding from components 2 and 3; (c) the building of minimal institutional capacity at the regional level; (d) rehabilitation works' identification, design, approval and procurement with due consideration to safeguards; and (e) the creation of sufficient micro-enterprises to perform the routine maintenance activities. The implementation schedule and disbursement profile reflect this expected longer startup period.

Partnership arrangements. The most important coordination takes place across the different regional governments, and with municipalities and other local stakeholder groups. Within regional government's the participatory regional road plans – will be closely coordinated with other planning instruments such as the regional development plans. The project also seeks coordination mechanisms with other related government programs, such as the Program for the Modernization of the State. Based on the successful experience of the Multi-Sector Commission during project preparation, a coordinating framework will be structured and facilitated through

the multi-sector Advisory Committee, consisting of representatives from the MEF, the CND, the MTC and the regions.

The project coordinates closely with the Bank-funded Programmatic Reform Loans I and II (Decentralization and Competitiveness SAL, see Box below). While the project will help achieve the objectives of "improving the efficiency and quality of public expenditures" as well as "reducing logistics costs and improving public services in infrastructure", the Decentralization and Competitiveness SAL will help improve the fiscal framework in which regional governments operates. In addition, the policy matrix of the SAL has reported in 2004, the creation of "a multi-sector commission to delineate a plan for the gradual transfer of road assets from the central government to the regions" and is requiring by December 2005 that "Government clearly defines the competencies of the national, regional and local governments on infrastructure management and regulation, and strengthens regional and local infrastructure agencies with an emphasis on private sector participation, as means to raise the impact of interventions and ensure a smooth transfer of responsibilities as part of the decentralization process".

Box: Peru - Programmatic Decentralization and Competitiveness Structural Adjustment Loan

The decentralization of key functions and the increased policy making and fiscal capacity of regional governments are critical steps in improving the competitiveness of poor regions. To complement and reinforce the decentralization program, and to secure economic and social objectives, the GoP in 2002 also set up an ambitious competitiveness program with a clear emphasis on reaching and assisting regions in increasing their competitiveness. The program focused mainly on institution-building for competitiveness, improving productivity and the mix and quality of Peruvian products, reducing logistic costs, upgrading infrastructure services, enhancing the investment climate and facilitating exports. (...)

Peru's model of decentralization gives regional (and macro-regional if ever constituted) governments a mandate to stimulate investment, competitiveness and growth. Fulfillment of this broad mandate has two essential prerequisites: (i) strengthened fiscal and financial management capacity; and (ii) an adequate legal framework supported by proper signals from the central government. For instance, regional and local governments committed to competitiveness enhancement must improve the efficiency and quality of public expenditures. Excessive payroll or, more broadly, operational costs, create rigidities and inefficiencies that reduce the quality of service and threaten fiscal sustainability. Poor investment planning and misallocation of capital expenditures will reduce opportunities for investment. Lack of modern accounting and good asset management lead to the unproductive use of public resources that would otherwise benefit from alternative management arrangements involving partnerships with the private sector. (...)

In light of the significant progress achieved under the first loan, this second proposed loan continues to support the ongoing efforts of the GoP with three specific objectives: (i) to protect fiscal sustainability during Peru's transition to a more decentralized state; (ii) to assist in strengthening management and fiscal capacity at sub-national levels for progressive assumption of service responsibilities; and (iii) to support the creation of a better regulatory and investment environment for increasing Peru's competitiveness, with a strong regional focus. (...) The proposed loan will achieve these competitiveness objectives by supporting efforts to: (i) institutionalize the Competitiveness Agenda and implement its regional components; (ii) promote exports and trade facilitation; (iii) improve productivity and the mix and quality of Peruvian products; (iv) reduce logistics costs and improve public services in infrastructure; and (v) improve the investment climate by reducing the cost of doing business. (...)

The high cost of transportation – and its large share within logistics costs – reflects the poor state of the country's transport infrastructure and services. (...) The main challenge consists of increasing capital investment in the road sector at both the national and regional levels without sacrificing the maintenance of existing infrastructure assets. To face this challenge, it is recommended that the GoP deepens reforms in the sector by: (i) strengthening road maintenance; (ii) creating a solid framework for the decentralized management of road assets; and (iii) strengthening its environmental and social evaluation safeguards. (...) The Bank is currently preparing a project to assist the GoP in the execution of its road decentralization process.

Source: Project Appraisal Document, World Bank, November 2004.

Coordination will also be ensured with two World Bank-funded technical assistance loans (TALs) which are focusing on the administrative mechanisms of the decentralization process and on decentralization in the social sectors (see Box). In particular, the proposed project – under its

participatory road plans component - will complement the reforms supported by the first TAL to improve participatory budgeting processes and the accreditation of regions. The institutional strengthening program supported by the proposed project will also be closely related to the TAL's objective to improve the efficiency of public expenditures, with emphasis on managing and planning resources assigned for transport. Finally, the proposed project complements the IDB-funded support to the CND.

Box: Other on-going Reforms in the Area of Decentralization and Institutional Strengthening.

To support the on-going decentralization process in Peru, a set of initiatives have been launched with the support of two World Bank-financed technical Assistance Loans (TALs). The first set of initiatives focuses on the social sectors, with the larger part of the Bank project being channeled through the Ministry of Women and Social development (MIMDES) for establishing monitoring indicators and systems for the decentralization of activities in the social sectors. The second set of initiatives focuses on the administrative mechanisms of the decentralization process.

The **Peru Accountability for Decentralization in the Social Sectors**' project is aiming at strengthening results-oriented and participatory planning, monitoring and evaluation in the social sectors, with an emphasis on decentralized social programs of the MIMDES. Specific objectives include: (i) improve the quality of social policies and programs in the context of decentralization; (ii) implement the performance agreements and accreditation systems for social programs in order to improve service delivery outcomes; and (iii) improve the M&E system in a decentralized context.

The **Peru Institutional Capacity for Sustainable Fiscal Decentralization's** project is aiming at strengthening public sector capacity for implementing a sustainable fiscal decentralization and improving institutional effectiveness for adequate service delivery by sub-national governments. Specific objectives include: (i) reinforce the fiscal and financial planning, accounting, budgeting, reporting and overall management capacity of sub-national governments. At the same time, it strengthens the capacity of the national government to monitor and evaluation fiscal and financial performance in accordance with the ceilings and targets already established in legislation; (ii) support the initial steps towards incentives and evaluation of quality of expenditure at sub-national levels; and (iii) provide technical assistance to reduce transaction costs, enhance operational efficiency and mobilize idle resources at sub-national levels.

These two operations will strengthen the overall budgeting, administrative and financial management capacity of the regional governments as well as the performance monitoring function from the central government. The Regional Transport Infrastructure Decentralization project will complement these initiatives, with a focus on the transport sector. It will help develop the regions' planning function in the transport sector as well as their sectoral units, with the ultimate objective of improving the prioritization, efficiency and effectiveness of public expenditures in this sector. Through the elaboration of the regional Road Plans and the agreement on a time-bound program of institutional reform, it will also contribute to the accreditation of the regions, a condition for them to be transferred more resources.

2. Monitoring and Evaluation of Outcomes/Results

The monitoring of project implementation encompasses two levels. One level consists of the review of project performance and annual plans that will be undertaken by PVD on a continuous basis; the other consists of periodic performance audits, participatory evaluation exercises (involving in particular regional governments) and impact assessment studies that would be carried out by independent firms and specialized NGOs. The application of the project information and monitoring system would allow PVD, IDB and the Bank to ascertain the progress of the implementation of each sub-project and the degree of achievement of the project development objectives. At least every twelve months or as necessary, auditors acceptable to IDB and the Bank - and financed under component 4 - will conduct a performance audit of the

implementation of the project by examining a sample of sub-projects under execution. The exact scope of these audits will be determined each year during a supervision mission (at least two supervision missions will be organized every year). The audits could particularly focus on the execution of the project physical components (quality and cost of works), procurement procedures and compliance with the guidelines of the Project Operational Manual, performance indicators agreed between PVD and each regional government and other implementation procedures (eg. social, environmental practices, participatory process). Through the audit, cost comparisons could be made available and reviewed to identify procurement problems or other factors contributing to variations among the different regions; the scope of the sample of work sites included in the audit will be adjusted to these findings.

The project will also undertake an assessment of intermediate socio-economic impact indicators related to the contribution of regional roads to productive activities and the socio-economic well-being of participating families. These evaluations may also use control cases, by comparing similar territories that were not subject to project interventions. The information annually generated under the household survey, ENAHO, will be used, for cross-checking the results of the evaluation. The costs of these evaluations have been included in component 4. PVD will contract an external consulting firm to carry out these analyses. Results will be disseminated, in particular to the regional governments.

A participatory monitoring process will be also incorporated into the overall M&E system to include a beneficiary assessment of the decentralization process and adherence to project rules, progress and results of implementation. This will, in particular, be implemented through the organization of participatory events involving high level representatives from regional governments (presidents of regional councils or *gerentes generales*). Similar consultations of regional governments were organized during project preparation and they provided valuable inputs to project design.

3. Sustainability

Sustainability is a cornerstone of the overall project strategy to ensure the quality, continuity and reliability of the regional transport interventions, within the broader decentralization agenda. For this reason, the project includes a significant number of dispositions within each of its four components in order to ensure a better sustainability.

A major condition for sustainability is that sufficient institutional capacity has been built at the regional level by the end of the project. To this end, a minimum set of institutional pre-conditions for regional governments to participate in the project has been determined and a customized and comprehensive institutional strengthening program will be implemented as part of component 4. It will help provide tailored training and expertise to each regional government in all aspects of planning, road asset management and safeguards. In addition, the restructuring of PVD should refocus the mission of the central agency on providing institutional support to the regions, thus contributing to the overall sustainability of the decentralized framework. Finally, the "competitive fund" has been introduced with the ultimate objective of providing additional incentive for greater sustainability by rewarding the regional governments that have implemented institutional reforms in a sustainable fashion.

A second major condition to the sustainability of the improvement in secondary road conditions is that adequate levels of maintenance are performed. To this end, component 3 will support the scaling up of the micro-enterprises model which has already been successfully experimented by Provias Rural, including for 2,706 km of regional roads transferred to regional governments.

To make institutional reforms associated to the decentralization process on an efficient and effective path, phasing out strategies have been included in the project design. In particular, the appropriate downsizing and refocus of Provias Departamental will be a substantial contribution to the sustainability of the decentralization process in the road sector. The decision to downsize the *unidades zonales* has been taken by the Peruvian authorities and this process, already underway, has been well explained and understood – although sometimes with certain initial resistance - by the various stakeholders involved. A plan for the restructuring of PVD has been elaborated during negotiations and signed by the Transport Vice-Minister. Technical assistance, provided under component 4, should help design and implement the phasing out process. Employees of PVD, hired under fixed-term contracts that expire by mid-2005, have been encouraged to create or join micro-enterprises or SMEs that could then be contracted by regional governments to perform road improvement activities. Similarly, the strategies that will be prepared by regional governments in order to phase out the old "force account" approach to road rehabilitation and maintenance are an additional effort towards the sustainability of the new, more efficient, model based on the contracting out of these activities.

The project is also trying to promote a sustainable approach to participatory regional road planning. Planning units within each regional government will be trained and receive the necessary technical assistance to fully prepare these plans and disseminate their results. In addition, some resources will also be made available if it becomes necessary to revise or update these plans, thus ensuring the sustainability of the planning process.

Finally, a critical issue to ensure sustainability is that sufficient flows of funding are made available to regional road asset management. During project preparation, a fiscal framework has been discussed and agreed with MEF to ensure that disbursements would not be constrained by indebtedness ceilings (see paragraphs C4 and C5 of Annex 1). An assessment of the financial capacity of regional governments within the fiscal decentralization context has also been performed, ensuring that regional counterpart funding would be made available (see paragraph C3 of Annex 1).

It should also be noted that, in the past, revenues from road users' charges and fees have been exceeding significantly road expenditures. Therefore, the sector is in theory self-sustainable, provided that sufficient resources generated by the sector are earmarked to improve transport conditions and maintain roads at an acceptable level. According to an analysis undertaken in 2000, [11] these revenues amounted to an annual average of about US$570 to US$600 million in the period 1997-1999 (see paragraph C2 of Annex 1).

[11] Guerra-Garcia, 2000.

4. Critical Risks and Possible Controversial Aspects

The possible risks refer to the decentralization process (political momentum, existence of counterpart funds and institutional capacity at the regional level, downsizing and strategic evolution of PVD) and to the methodologies to be followed during project implementation, especially those that involve: participatory processes for the selection of investments, transition from "force account" to contracting out of rehabilitation and maintenance activities. The successful results obtained with the decentralization of rural roads' management responsibilities at the municipal level provide a powerful benchmark for project implementation and constitute an additional incentive for the Peruvian authorities to overcome these risks. Nonetheless, the relationship between central and regional governments has been often charged with political pressures and this might affect project implementation in those regions affected by these pressures. The overall risk for the project is rated as Modest/Substantial.

Risk	Mitigation
The momentum to advance decentralization policies weakens, threatening the sustainable implementation of the program (insufficient intergovernmental transfers and/or lack of interest in internalizing technical assistance activities). (Modest)	Pay particular attention to institutional capacity building and secure resources at the regional level. Assess financial capacity of regional governments for the short and medium-terms.
Proper allocation of counterpart funds does not materialize or debt ceilings are lowered to an extent that loan disbursements are reduced, affecting project implementation. (Substantial)	Early agreement on schedule of counterpart requirements and proper assignment of debt to regional governments and/or Ministry of Transport.
Restructuring of the PVD is resisted and continues to perform current activities in conflict with gradual devolution of responsibilities to the regional governments. (Modest/Substantial)	Early agreement on PVD's restructuring and regular monitoring of implementation through legal covenant. Technical assistance resources have been included in project design to help design and implement a timetable of follow-up activities supporting the institutional objectives of the project.
Tasks related to the management of the departmental road network continued to be largely performed by force account of the regional governments instead of being contracted to the private sector. (Modest)	Scale up the micro-enterprises' model Use positive results obtained in existing programs (e.g. Rural Roads I and II) to convince regional governments of the model's efficiency and effectiveness
The institutional capacity of regional governments remains insufficient when the substantial devolution of departmental road management takes place. (Substantial)	Ensure that transfer of responsibilities is performed in a timely manner. Phase in appropriately project resources for institutional capacity building and organizational reform.

5. Loan/Credit Conditions and Covenants

Effectiveness conditions:

- The PVD has prepared and adopted the Project Operational Manual in terms and scope acceptable to the Bank.

Covenants:

(a) PVD should furnish to the Bank no later than 6 months after the effective date, the contract appointing the independent auditors under TORs and with qualifications and experience satisfactory to the Bank.
(b) PVD should furnish to the Bank, no later than 6 months after the effective date, a Ministerial resolution, in form and substance satisfactory to the Bank, for the creation of the Multi-Sector Advisory Committee.
(c) PVD should furnish to the Bank, no later than 18 months after the effective date, the relevant and applicable legal framework for hierarchy of roads and the technical norms for the rehabilitation of gravel roads.

Conditions of disbursements for allocation to participating regions:

For disbursement in one region, PVD shall furnish to the Bank a report confirming that the respective Framework Agreement, Financing Agreement, Annual Operation Plan, PRRP and Institutional Agreement have been prepared and approved.

D. APPRAISAL SUMMARY

1. Economic and Financial Analyses

A cost-benefit analysis has been done using the Road Economic decision Model (RED) developed by the World Bank for the economic evaluation of investments and maintenance alternatives for low-volume roads. The RED model adopts the consumer surplus approach to estimate project benefits that are comprised of road user costs (vehicle operating costs, passenger time costs and accident costs) savings, which are estimated using road user costs relationships from the Highway Development and Management Model (HDM-4). The evaluation was done for an analysis period of 15 years and adopting a discount rate of 14 percent, which is the standard discount rate adopted in Peru since 2000. Since the exact investment program is not known at the time of appraisal (it should come out from the participatory planning exercise), two approaches have been considered in order to estimate the economic rate of return (ERR) of the project:

(i) The first evaluation considered 51 tentative road sections, totaling 2,230 km, with traffic ranging from 50 to 317 AADT [12] and an average percentage of trucks and buses of 40 percent. Based on the economic comparison of the project alternatives, one of them was selected for each road that yields a reasonable rate of return. The evaluation shows that the representative rehabilitation program would have an ERR of 26 percent with a global NPV of US$63.4 million. The ERR would fall to 22 percent with a 20 percent increase in investment costs, and to 21 percent if benefits were 20 percent lower than estimate. The switching value analysis shows that for the ERR to fall to 14 percent, investment costs would need to be 1.7 times higher, or benefits 41 percent lower than estimated. Overall, the representative rehabilitation program will provide some 1,312,000 rural inhabitants with access to an all-

[12] Average Annual Daily Traffic.

weather road. The results of the analysis indicate a satisfactory economic justification of the representative rehabilitation program.

(ii) The second evaluation was performed for the eight road segments which have been selected in order to be rehabilitated during the first year of the project. These roads have completed technical and economic studies, and, therefore, more up-to-date and detailed information are available. The combined length of these roads amounts to 251.1 kilometers and their total rehabilitation cost to US$ 11.7 million. The evaluation shows that the overall ERR for these roads is 25 percent, and that all the roads have an ERR higher than 14 percent. The combined NPV of the first year rehabilitation program is US$ 5.58 million and 338,000 rural inhabitants would be provided access to an all-weather road. The results of the analysis indicate a satisfactory economic justification of the first year rehabilitation program.

On the fiscal side, the project is not expected to bring additional resources to the transport sector as a whole but, rather, to produce reallocation across sub-sectors, resulting in a clear additionality of funds for the regional roads. Indeed, due to fiscal constraints and the government's priorities, the overall funding for the transport sector from external resources is planned to decrease in the coming years with a reallocation of those resources within the sector. MEF simulations for 2004-2009 (Table 2) show a decrease of external resources (i.e., loans from multilateral institutions) for the transport sector, even though disbursements of foreign loans are expected to increase from US$450 million in 2004 to US$500 million from 2005 and beyond. These simulations show a significant reallocation of external funding between the three networks. In particular, secondary roads are expected to attract an increasing number of external resources from the proposed project—up to US$36 million in 2008—to strengthen the competitiveness position of the regions and support the institutional development of regional governments in managing the road networks under their jurisdiction. The additional funds for regional roads are justified by the very poor condition of the network. In addition, these funds will provide an additional incentive for regional governments to participate in the program and, thus, contribute to increasing the chances of a successful transfer of responsibilities at the regional level.

Table 3: Projection of External Resources Available for the Road Sector.

US$ million	2004	2005	2006	2007	2008	2009
National roads	73	62	54	40	30	30
Regional roads	0	11	22	28	36	8
Rural roads	26	26	11	6	24	24
Total external resources for transport	101	99	87	74	90	62
Total external resources for all sectors	450	500	500	500	500	500
Share of total resources for transport	22%	20%	17%	15%	18%	12%

Sources: MTC revised budget 2004, MEF Office of Multi-Annual Programming 2004.

In addition, the program has been globally approved by the National System of Public Investment (SNIP). The SNIP performs a cost-benefit analysis for all public investment project in Peru (with a discount rate of 14 percent).

2. Technical

The characteristics of the rehabilitation and maintenance activities to be identified through the PVDPs do not impose major technical difficulties. The technical characteristics will involve improvements to existing surfaces, drainage systems and retaining walls to ensure a level of mobility tailored to the specific transport needs of the regional populations as identified by them in the PVDPs. The design of rehabilitation and maintenance works will follow technologies and standards, specified by national norms (applicable to gravel roads). A clarification of these technical norms is needed in order to ensure that the proper specifications are applicable for roads with traffic volumes between 200 and 400 vpd. A covenant securing the clarification of applicable norms has been introduced in the legal agreement.

3. Fiduciary

Financial management. A financial management assessment has been undertaken in accordance with OP/BP 10.02 and the Guidelines for Assessment of Financial Management Arrangements in World Bank Financed Projects. This assessment covered, so far, PVD's financial management structure, organizational structure and staffing, accounting policies and procedures, treasury, information systems, internal controls and internal audit and found them adequate to carry out the present project. The financial management capacity of the regional governments has been considered relatively weak.

The Bank's financial management team, in accordance with the proposed action plan, has made significant achievements in the areas of flow of funds, disbursement arrangements, staffing, auditing TORs and reporting, donors and Government requirements harmonization, and the use of national financial information systems (SIAF) to improve the flow of funds, disbursements and reporting, financial accountability of PVD and management of inter-institutional arrangements (see Annex 7).

However, some weaknesses were identified and still need to be handled. The major capacity constraints relate to: 1) the lack of experience of PVD with other Bank projects; 2) the inability to produce Financial Monitoring Reports (FMRs) to support project management; 3) the lack of technical experience and financial management capacity of the involved regional governments in managing challenging projects, 4) the lack of experience of PVD in satisfying donors' requirements especially in the areas of reporting; 5) the new decentralized environment of the current project, with centralized coordination and reporting from PVD, and 6) possible resistance of PVD's and regional governments' staff to accept the new way of doing public works.

In order to correct the above weaknesses that could compromise project's performance, the Bank's financial management team will review on an ongoing basis the implementation of a proposed action plan (see Annex 7). At the time of negotiations, all requirements from this action plan had been fulfilled. The action plan has been designed in such a way that adequacy of the system to satisfy Bank minimum financial management requirements will be reached at the estimated date for effectiveness.

Procurement. An assessment of the capacity of the agencies that would implement procurement actions for the project has been carried out. The assessment reviewed the organizational structure for implementing the project and the interaction between Provias Departamental and the regional

governments. Procurement activities will be carried out by Provias Departamental (for technical assistance) and participating regional governments (for the works and related supervision) under close coordination and supervision of the former. Annex 8 details the procurement processes that will be followed as well as the agreed institutional strengthening requirements for PVD and the regional governments. The Overall Procurement Risk is assessed as average.

4. Social

The project might trigger the policies OP 4.12 (Involuntary Resettlement) and OD 4.20 (Indigenous Peoples). Following policy requirements, the Borrower has prepared the relevant frameworks, one for Involuntary Resettlement and another one for Indigenous Peoples Development Plans. These frameworks are acceptable to the Bank. The frameworks describe the roles of the institutions responsible for the design and implementation of resettlement plans and Indigenous Peoples development plans in case these policies are triggered by specific sub projects. Specific plans cannot be prepared before appraisal because of the nature of this project which is to support decentralization at the national level and to transfer responsibilities to the regional governments, and it is not known at appraisal whether the works for rehabilitation would entail resettlement or would affect indigenous peoples lands. Besides these policy requirements, the Borrower is preparing two detailed methodological guidelines to address resettlement and indigenous people's issues. The guidelines will be used as inputs for the capacity building component of the project and to strengthen regional skills regarding these subjects.

5. Environment

During project preparation, a number of measures, activities and instruments related to environmental management has been discussed and agreed between PVD and the two Banks. The implementation of these measures is needed in order to ensure compliance with the national environmental legislation and with the Bank safeguards' policies.

The project will only finance rehabilitation or maintenance activities for existing regional road segments. No significant environmental impacts are expected that could threaten, in a direct or indirect manner, the natural environmental in the project's areas of intervention. Therefore, the project has been categorized as "**category B**", according to the Bank Operational Procedure [OP 4.01].

This categorization is justified by the fact that the project's activities are not expected to have major environmental impact and that related prevention; mitigation or compensation measures can be easily identified and implemented with an adequate environmental management system in place during the various phases of the project cycle. The most significant environmental impact actually happened in the past, when these roads were built.

At appraisal, five major environmental issues were considered, in agreement with the Bank's Quality Assurance Team (QAT): a) review of the Bank's safeguards policies that are applicable to the project; b) preparation of a conceptual framework for the project's environmental management; c) environmental assessment of the first 8 road segments to be rehabilitated during

the first year of operation; d) preparation of a strategic environmental evaluation for the sub-sector of regional roads; and e) compliance with the national legislation.

As part of the appraisal preparation process, PVD, with the support of the DGASA unit of the MTC, has prepared simplified environment assessments for the 8 regional road segments that will be rehabilitated during the first year of operation. These assessments follow a methodology developed as part of the conceptual framework for the project's environmental management, and which is consistent with the Bank's QAT guidelines. The results from these assessments were validated by the Bank during field visits organized during the month of March 2005.

The environmental evaluation allowed to determine that 4 sub-projects have a moderate social and environmental risk (level 2), according to the classification elaborated in the Conceptual Framework for Social and Environmental Management. In addition, 4 sub-projects have a low social and environmental risk (level 1). The results are presented in Annex 10.

During project preparation, it was also decided that a Strategic Environmental Assessment would be prepared for the sub-sector of regional roads. The objective of this evaluation is to ensure that environmental issues will be properly addressed in the Government's policies, plans and programs for the sub-sector, and that sufficient capacity will be built to include environmental management in the design, execution and monitoring of individual sub-projects.

An evaluation of the existing institutional capacity to deal with environmental matters of each of the actors involved has been prepared. Based on this diagnosis, an institutional strengthening plan has been prepared, which identifies actors, requirements and resources available for environmental management. Taking into account the fact that regional governments are going to assume the largest responsibility for project implementation, particular attention has been paid to the strengthening of their capacity. Within their current organization, regional governments include an environmental unit but most of them have a very low capacity or are not operational. For that reason, the largest part of the institutional strengthening plan is targeted toward regional governments.

Finally, an estimation of the project's environmental expenditures has been performed. They cover in fact three categories of expenditures: the investment related to the prevention, mitigation and compensation of environmental impacts, and the costs related to the implementation of the institutional strengthening plan. Total costs have been estimated to **US$ 500,000**, of which US$ 380,000 for prevention, mitigation and compensation investments, and US$ 120,000 for institutional strengthening expenditures. This amount represents 4% of the amount assigned for the rehabilitation of the 8 initial regional road segments.

Taking into account the results obtained at appraisal and the various measures and activities that have been performed during project preparation, it can be concluded that the project has properly addressed the environmental requirements and that it complies with the Bank environmental safeguards policies.

6. Safeguard Policies

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[X]	[ ]
Natural Habitats (OP/BP 4.04)	[ ]	[X]
Pest Management (OP 4.09)	[ ]	[X]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[X]	[ ]
Involuntary Resettlement (OP/BP 4.12)	[X]	[ ]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[X]	[ ]
Forests (OP/BP 4.36)	[ ]	[X]
Safety of Dams (OP/BP 4.37)	[ ]	[X]
Projects in Disputed Areas (OP/BP/GP 7.60)*	[ ]	[X]
Projects on International Waterways (OP/BP/GP 7.50)	[ ]	[X]

Social safeguards, including the involuntary resettlement policy framework, and the environmental policies and procedures are described above. The safeguard policy on **cultural property** has also been included as required by recent Bank policies. In the event that chance findings of goods or sites that might appear of cultural significance are encountered during the project implementation, works will be stopped and the relevant authorities called upon to investigate the site. If these goods and sites are found of cultural significance, the subproject will be redesigned to avoid any harmful effects to such goods or sites, or otherwise cancelled altogether. These requirements and those related to environmental policies will be incorporated into the Project Operational Manual.

7. Policy Exceptions and Readiness

There are no policy exceptions by PVD and the corresponding regional government.

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

Annex 1: Country and Sector or Program Background

PERU: Regional Transport Decentralization

A – Background on the Decentralization Reforms:

Decentralization to local and regional governments constitutes one of the key elements of the development agenda in Peru. If well implemented, decentralization reforms could improve public sector performance by better involving local stakeholders in the design, implementation and monitoring of local development strategies, and making public agencies more accountable. Decentralization can also contribute to a sound investment climate (Box).

Box: Decentralization and the Investment Climate

Decentralization can contribute to a sound investment climate in several ways. Decentralization of regulatory responsibilities can help locales adapt approaches to their conditions and preferences and facilitate the involvement of stakeholders. Fiscal decentralization can assure local authorities that taxes raised locally will not be appropriated by the central government, giving local authorities incentives to develop their local tax base. Decentralization also permits a degree of international competition between centers of authority that can stimulate policy innovation and reduce the risk that governments will expropriate wealth.

But there are tradeoffs. Subnational authorities are not well placed to deal with issues that involve spillovers between jurisdictions. They may also face more severe capacity constraints and be unable to exploit economies of scale with particular functions. And subnational governments are not immune from governance problems-and in some contexts may be more vulnerable to them than national authorities.

Reflecting these tradeoffs, the optimal location of particular policy and administrative responsibilities will depend on the country and policy issue concerned. Small countries present fewer opportunities for decentralization than larger ones. But even in large countries, some matters will be best handled centrally, some subnationally, and others may require some form of shared responsibility. A clear delineation of responsibilities between tiers of governments reduces uncertainty and risk for firms and improves accountability.

Source: World Development Report 2005: A better investment climate for everyone.

Peru initiated a decentralization process at the regional level about 20 years ago. In 1984, a national regionalization plan was approved by the Congress but its implementation has been pending until 1987 when the regionalization basic law [13] was promulgated. Eleven regions were then created, whose regional governments were elected for the first time in 1989 and 1990. However, in April 1992, the regionalization process was terminated and regional governments were replaced by deconcentrated bodies (the CTARs [14]), whose heads were designated by the central government. In 1993, the new constitution introduced a legal framework for decentralization, with the division of the country in regions, departments, provinces and districts (Art. 188). According to the constitution, the regions are autonomous and headed by the Presidents of the Regional Coordination Councils, elected for 5 years. A decentralization law [15] was then passed, but it had in fact little impact to promote the decentralization process, particularly at the regional level.

[13] *Ley de Bases de Regionalización,* no. 24650, promulgated on March 19th, 1987 and amended on February 10th, 1987.
[14] *Consejos Transitorios de Administración Regional.*
[15] *Ley Marco de la Descentralización,* no. 26922.

Finally, in 2002, major legislations were passed, which constitute the existing legal framework for decentralization at both local and regional levels. [16] Specific laws were also passed, allowing the transfer of the secondary and tertiary road networks to sub-national levels of government. In addition, several legislations were promulgated to ensure an efficient use of fiscal resources by regional and local governments. [17] According to the law, regional governments have the exclusive responsibility for (1) planning the integrated development of their region and implementing the corresponding socio-economic programs; (2) formulating and approving regional development plans, after consulting with the municipalities and civil society; (3) approving their internal organization and their budget; (4) promoting and executing public investments - with a regional scope - for roads, electricity, communications and basic services, aligned with objectives of sustainability, competitiveness, private sector participation, market enhancement and profitable activities' development; and (5) developing tourism.

Box: Decentralization and the Competitiveness of the Peruvian Regions.

The decentralization of key functions and the increased policy making and fiscal capacity of regional governments are critical steps in improving the competitiveness of poor regions. To complement and reinforce the decentralization program, and to secure economic and social objectives, the GoP in 2002 also set up an ambitious competitiveness program with a clear emphasis on reaching and assisting regions in increasing their competitiveness. The program focused mainly on institution-building for competitiveness, improving productivity and the mix and quality of Peruvian products, reducing logistics costs, upgrading infrastructure services, enhancing the investment climate and facilitating exports. (...)

Decentralization can indeed be a powerful instrument to secure social, political and economic objectives. The decentralization system will only be sustainable if based on economic realities, with regions and municipalities building up their own growth potential through focused private sector development strategies. The ultimate success of decentralization in Peru will be measured not as much by laws, procedures and processes but rather by the extent to which regional economic growth and employment are catalyzed. Regions must improve their competitiveness position to attract private investment and increase economic activity. Enhanced competitiveness requires: adequate and well-maintained infrastructure; low production and logistic costs; better access for regional products to domestic and foreign markets; improved productivity in regional firms; a better mix of regional products; the adoption of quality standards; greater technological capabilities and innovation; enhanced export assistance and trade facilitation; and improved overall regional investment climates. (...)

Peru's model of decentralization gives regional (and macro-regional if ever constituted) governments a mandate to stimulate investment, competitiveness and growth. Fulfillment of this broad mandate has two essential prerequisites: (i) strengthened fiscal and financial management capacity; and (ii) an adequate legal framework supported by proper signals from the central government. For instance, regional and local governments committed to competitiveness enhancement must improve the efficiency and quality of public expenditure. Excessive payroll or, more broadly, operational costs, create rigidities and inefficiencies that reduce the quality of service and threaten fiscal sustainability. Poor investment planning and misallocation of capital expenditures will result in reduced opportunities for investment. Lack of modern accounting and good asset management lead to the unproductive use of public resources that would otherwise benefit from alternative management arrangements involving partnerships with the private sector.

Source: Second Programmatic Decentralization and Competitiveness Structural Adjustment Loan – Project Appraisal Document, World Bank, November 2004.

In the road sector, regional governments are competent to plan, administer and execute the development of regional road infrastructure (ie. excluding national and rural roads) according to

[16] *Reforma Constitucional sobre Descentralización* (Ley No. 27680), *Ley de bases de la descentralización* (Ley no. 27783), *Ley Orgánica de los Gobiernos regionales* (Ley No. 27867 amended by Ley No. 27902).
[17] *Ley de Prudencia y Transparencia Fiscal* (Ley no. 27245), *Ley del Sistema de Inversión Pública* (Ley no. 27293).

the prioritization performed in the regional development plans. They should also promote private investment (domestic or foreign) in transport infrastructure projects and supervise the management of regional roads.

In parallel to the political decentralization process, some progress has been achieved in the area of fiscal decentralization. Transfers to regional governments increased dramatically in 2003, amounting to about 14% of overall public investment that same year. They increased to 16% of overall public investment in the approved 2004. However, about two thirds of these resources are tied to the payment of public employees and related social obligations, [18] reducing significantly the capacity of the regions to invest in capital expenditures: resources for capital investment only amounted to US$131 million in 2003. A little bit less than a quarter of these capital expenditures (US$32 million in 2003) were spent in road investments (rehabilitation or improvement). Transport-related expenditures represented in 2002-2004 only between 2 and 3% of regional governments' total expenditures (see table).

Table: Evolution of Regional Government's Expenditures (2002-2004).

US$ million	2002		2003		2004 (as of September)	
	Total	Transport	Total	Transport	Total	Transport
Capital expenditures	78	17.5	131	31.8	107	26.1
Current expenditures	572	3.2	1,160	8.6	1,417	6.6
Total expenditures	**651**	**20.7**	**1,291**	**40.4**	**1,524**	**32.7**
Share of transport in total expenditures	-	3.2%	-	3.1%	-	2.1%
Share of transport In capital expenditures	-	22.4%	-	24.3%	-	24.4%

Source: MTC.

In spite of the progress achieved, regional governments do not currently have revenue-generating capacity and they rely exclusively on central governments' transfers. In theory, they are allowed to borrow but only for investment and borrowing without the government's guarantee has a ceiling which is established in the Law of Fiscal Transparency Responsibility and in the Law of Fiscal decentralization. In practice, given the lack of creditworthiness history and the lack of capacity to generate their own resources, the ability of regional governments to borrow remains extremely limited.

The Peruvian model for decentralization is progressive in order to ensure that responsibilities are handed over to institutions with sufficient technical expertise and managing capacity. An

[18] Resources come from shares of cannon receipts and ordinary resources as well as from proceeds from the privatization of specific assets (though these proceeds did not materialized in 2003). For the latter purpose, a fund—the so-called FONCOR, or Regional Compensation Fund—has been created to allocate resources to the development of regional infrastructure projects (with allocations related to fiscal effort, poverty, and proximity to the country's frontiers). Another fund—the FIDE, or Intergovernmental Fund for Decentralization—would be used for funding interregional infrastructure initiatives and will also make use of a part of the resources obtained through privatizations, but it did not have any resources in 2003 and none have been considered in the 2004 budget. Cannon receipts are assigned to regional and local governments according to a poverty formula. They are not assigned by sector but they can only be used for infrastructure investment. The use of these resources is currently not monitored by MEF, but there is some evidence that up to 20% are being used for current expenditures (salaries).

accreditation methodology (National Accreditation System Law) [19] has been designed to verify that local and regional government did actually reached sufficient capacity. As envisaged, the accreditation system is too broad to be used as an entry requirement for the proposed program; instead, the institutional capacity building component of the proposed program is expected to contribute to the future accreditation of the regions by helping set up a minimum institutional capacity for the road management sector (but this capacity could also benefit to other sectors). Finally, the creation of "macro-regions" constituted from the merging of existing *departamentos* has been proposed in order to benefit from possible economies of scale. In 2005, two merging have been proposed: (1) between Lambayeque, Piura y Tumbes; and (2) between Ayacucho, Huancavelica y Ica. However, the institutional consequences of such merging are still unknown.

B – Background on the Transport Sector:

B1 – Description of the Road Network and International Comparisons.

In 2003, the Peruvian road network included 78,200 km of classified roads of which 8% were in good conditions, 14% in average conditions and 78% in bad conditions. This network was comprised of 16,980 km of national roads, 14,250 km of regional roads and 46,970 km of rural roads. The classification of roads into national, departmental and rural roads has been set by legislation. [20] In a number of cases, this classification appears to be outdated and some segments should be moved to a different category. In addition, the technical characteristics of the departmental and rural roads ought to be revised. The revision of the existing classification is under way, under a consultancy paid by the IDB.

Table 1: Conditions of the Peruvian Road Network.

	Good		Average		Bad		Total
	km	%	km	%	km	%	
Primary (National roads)	3,912	23	6,848	40	6,220	37	**16,980**
Secondary (Regional roads)	2,156	15	634	5	11,461	80	**14,250**
Tertiary (Rural roads)	282	1	3,593	8	43,095	91	**46,970**
Total	**6,350**	**8**	**11,075**	**14**	**60,776**	**78**	**78,200**

Source: Ministerio de Transportes y Comunicaciones (MTC), 2003.

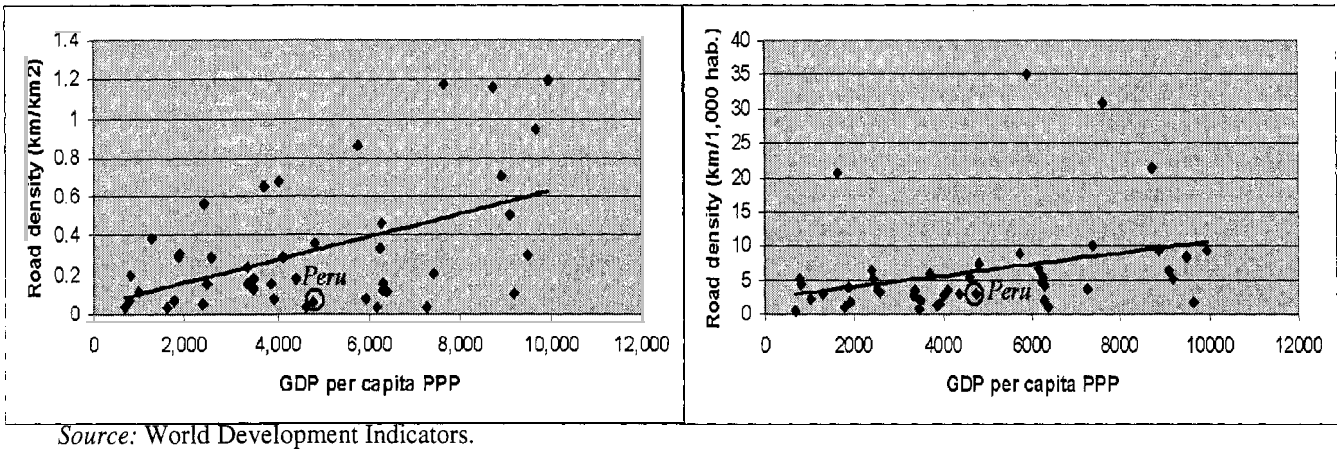
The proportion of roads in good or average conditions ranges from 63% for the primary network, to 20% for the secondary network and only 9% for the tertiary network. It is estimated that about 14% of the total network is paved. [21] In addition to the 78,200 km classified network, there could be up to 50,000 km of unclassified roads (mostly rural roads in bad conditions).

[19] *Ley del Sistema de Acreditación de los Gobiernos regionales y Locales (Ley No. 28273)* and its *reglamento* approved through Supreme Decree No. 080-2004-PCM.

[20] *Decreto Supremo* No. 009-95-MTC.

[21] The paved road network includes 9,000 km of national roads (52% of the total national network), 1,100 km of regional roads (8% of the regional network) and 950 km of rural roads (2% of the rural network).

Figure: Road Density and Level of Development in 2000.

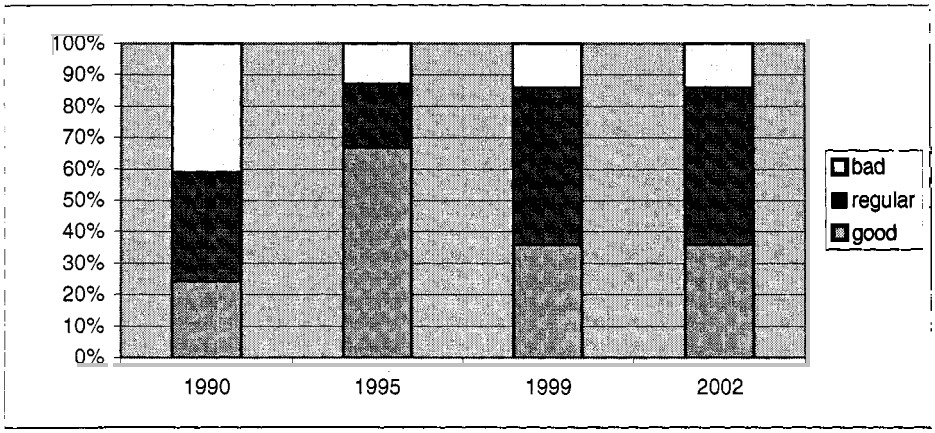


Source: World Development Indicators.

Whichever criterion is used (compared to a country's geographic area or to its population), road density in Peru is lower than what would be expected given the level of development. In fact the density per capita would need to be doubled in order to be aligned with the average in the income group, while the density relative to the area would need to be multiplied by five. In Latin America, the Peruvian road density per capita is lower than most other countries (including Bolivia, Nicaragua, Ecuador, Panama, Brazil, Costa Rica and Chile). The road density per area is only lower in Bolivia (0.05 km/km2 compared to 0.06 in Peru).

Due to under-investment and poor management of resources, the stock of transport infrastructure has seriously deteriorated over the past decade. For certain segments (eg. paved national roads), the lack of adequate maintenance is a critical factor for road degradation. Indeed, while the conditions of the national road paved network had improved over the period 1990-1995, the length of paved primary roads in poor conditions increased from 787 to 1,259 km from 1995 to 2002.

Figure: Conditions of the Primary Road Paved Network (1990-2002).



Source: Fernández Ordóñez, O. (2004).

B2 – The GoP Long-term Strategy for the Transport Sector.

The following principles are guiding the GoP's long term strategy for the transport sector:

- Alignment of public investment in transport infrastructure with the country's competitiveness needs (primary and secondary networks);
- Contribute to expanding the assets of the rural poor and tackling inequalities through the improvement of transport conditions in rural areas and coordination with other infrastructure sectors;
- Full decentralization at the regional and local levels for the management of the secondary and tertiary road networks (ie. empowering local stakeholders through the promotion of participatory planning, implementing the corresponding institutional reforms and building capacity);
- Promotion of private sector participation in transport infrastructure (construction, rehabilitation, operation, maintenance); develop road concessions whenever feasible;
- Refocus of public agencies on regulation and strategic planning and phasing out of their direct involvement in physical works.

Ultimately, the vision for the sector in 2010 is to have fully put in place the institutional framework needed for a decentralized management of the secondary and tertiary networks; to have improved the efficiency of road assets' management with active participation of the private sector (eg. through concessions within the new Guarantee Facility); and to have improved the effectiveness of road interventions through the scaling up of participatory planning and the alignment of interventions on the primary work with the national competitiveness agenda.

Figure: Situation of Road Management Practices in 2005.

	National Government	Regional Governments	Municipalities (provinces and districts)
Network responsibilities	Primary (national roads) but MTC – through PVD – still continues to intervene on the secondary network	Secondary (regional roads) since the 2002 decentralization laws; because of outdated and too rigid road classification, regions sometimes intervene in primary or tertiary roads.	Tertiary (rural roads) since the decentralization laws; because of outdated and too rigid road classification, municipalities sometimes intervene in primary or secondary roads.
Planning	National transport plan; certain decisions are highly politicized	Participatory Regional Road Plans have been prepared in 8 regions	Participatory Provincial Road Plans have been prepared in 100 provinces
Construction	Contracted out to private enterprises; the new Guarantee Facility is being put in place to help develop concessions	Contracted out to private enterprises; in spite of Decentralization, PVD still intervene to build some regional roads	Contracted out to private enterprises (by Provincial Road Institutes in 38 provinces)
Rehabilitation	Contracted out to private enterprises	Contracted out to private Enterprises; in spite of decentralization, PVD still intervene to rehabilitate Some regional roads	Contracted out to private Enterprises (by Provincial Road Institutes in 38 provinces)
Maintenance	Largely by force account but routine maintenance with micro-enterprises is being successfully experimented	Largely by force account but routine maintenance with micro-enterprises is being successfully experimented on 2,706 km of regional roads	In the 12 *departamentos* of the 2nd Rural Road Project, routine maintenance is performed by micro-enterprises and periodic maintenance is contracted out

Figure: Vision of Road Management Practices in 2010.

	National Government	Regional Governments	Municipalities (provinces and districts)
Network responsibilities	MTC exclusively focuses on the management of the primary network; PVD and PVR have been downsized and they exclusively focus on providing assistance to local and regional governments	Regional governments exclusively focus on the management of the secondary network	Municipalities – through the Provincial Road Institutes - exclusively focus on the management of the secondary network
Planning	National transport plan aligned with the country's Competitiveness agenda	Participatory Regional Road Plans have been prepared or updated in all regions	Participatory Provincial Road Plans have been prepared or updated in all provinces
Construction	Contracted out to private enterprises; most feasible concessions have been initiated with the support of the Guarantee Facility	Segments prioritized through participatory planning are contracted out by regional governments to private enterprises	Segments prioritized through participatory planning are contracted out by Provincial Road Institutes to private enterprises
Rehabilitation	Contracted out to private Enterprises; experimentation of CREMA contracts?	Segments prioritized through participatory planning are contracted out by regional governments to private enterprises	Segments prioritized through participatory planning are contracted out by Provincial Road Institutes to private enterprises
Maintenance	All maintenance activities are contracted out; routine maintenance is performed by micro-enterprises under competitive contracting	All maintenance activities are contracted out; routine maintenance is performed by micro-enterprises under competitive contracting	All maintenance activities are contracted out; routine maintenance is performed by micro-enterprises under competitive contracting

B3 – Description of the Regional Roads' Network.

The regional road network is not evenly distributed across the various departaments. Cusco has the largest stock of regional roads (1,730 km) while there are none in Ucayali and only 46 km in Madre de Dios. There might be good reasons for such an uneven distribution (low population density, geographical characteristics, distribution of productive activities and markets). However, the sharp differences that exist across regions suggest to adopt a customized approach to regional road decentralization. Indeed, the institutional capacity needed to handle a 1,000 km network will not be the same as for 50 km of regional roads. In such cases, strong cooperation between regions may be justified by the potential economies of scale. This has also consequences in terms of prioritization methodology (in Madre de Dios, the contribution of regional roads to local development may not be as important as the contribution of rural roads or river-based transport modes).

Table: Regional Roads' Network in the Peruvian *Departamentos*.

Departamento	**Length of regional roads' network (km)**	*Departamento*	**Length of regional roads' network (km)**
Cusco	1730	Tacna	483
Arequipa	1417	Lima	458
Puno	1155	Huanuco	414
Ancash	1067	Amazonas	408
Ayacucho	891	Loreto	387
La Libertad	886	Ica	336
Cajamarca	739	Tumbes	318
Huancavelica	737	Moquegua	188
Pasco	621	San Martin	173
Junín	590	Lambayeque	104
Piura	578	Madre de Dios	46
Apurimac	544	Ucayali	0

Source: MTC – Provias departamental.

Traffic volumes differs significantly across regional roads segments. 48% of the secondary network has traffic volumes of less than 50 vehicles per day (vpd) and 91% of the network has traffic volumes of less than 200 vpd. In fact, only two regional road segments have traffic volumes exceeding 1000 vpd (a 18 km segment: *Puente Grau – Los Molinos* and a 13 km segment *Puente Francos – San Jacinto – Empate*). This has important consequences for the cost-effectiveness of paving additional segments of the network. Indeed, paving is usually justified for traffic volumes exceeding 200 vpd. As the quasi totality of the regional road network is already paved (see table below), no upgrading from gravel to paved road seems to be justified economically. In most cases, a well-maintained gravel road constitutes a better use of public resources than a paved road.

Table: Daily Traffic Observed on Regional Roads.

Traffic volume (vpd)	**Length of the secondary network with this traffic volume (km)**			**Share of the total secondary network (%)**
	paved	**unpaved**	**total**	
0 - 50		3,205	3,205	48
51 - 100		1,544	1,544	23
101 - 150		1,070	1,070	16
151 - 200		263	263	4
201 - 500	439	50	489	7
> 500	111		111	2

Source: Fernández Ordóñez, O. (2004).

B4 – Institutional Framework.

Provias Departamental (PVD) is the central agency which used to be in charge of managing the secondary network before the effective transfer to regional governments. As explained earlier, since the decentralization law was passed in 2002, the management of the secondary network is now the responsibility of the regions and PVD needs to refocus its mission on helping regional governments develop their institutional capacity in order to be able to manage these roads effectively and efficiently. PVD includes a staff of 175 in its headquarters in Lima and 16 regional offices (*unidades zonales*) with a total deconcentrated staff of 64 administrative and

1,000 workers and occasional operators. Early 2005, a decision was taken to close the *unidades zonales* and during negotiations, a plan for the restructuring of PVD was approved by the Transport Vice-Minister. In 2003, PVD had a S280 million budget ($80 million) and S250 million ($71 million) in 2004. Resources come from the national budget (fiscal revenues) and from the FIDA (*Fondo de Inversiones de Ancash*). A decision was also taken early 2005 to stop initiating new construction or rehabilitation activities so that PVD can start evolving towards a regulatory/promoting/supervising agency in the new decentralized environment.

Provias Rural (PVR) is the central agency in charge of managing the transfer of the tertiary network to local governments. In addition, PVR has been in charge of a small proportion of the secondary network (around 2,700 km) and transferred that responsibility to 12 regional governments in 2004, [22] along with technical assistance. Historically, the reason for PVR to be involved in secondary network management has been the need for continuity between some rural road segments to be rehabilitated under the Rural Roads Program. The successful results obtained suggest that the new decentralized approach to road management implemented under the Rural Roads Program (see Box) can actually be replicated for the secondary network. PVR has used the same micro-enterprise model to maintain the departmental roads as it did for rural roads. To maintain the 2,700 km of roads, 108 micro-enterprises were created and the responsibility for their contracting has been transferred to the twelve regional governments.

Box: Peru: A Decade of Successful Rural Roads' Management

Three quarters of Peru's rural population live in poverty, about half of the total in extreme poverty. In the rural parts of the Andean mountains, the isolation of the poor caused by non-existent or very inefficient transport infrastructure limits access to local markets, schools and health centers.

Since 1995, the Peruvian authorities have successfully designed and implemented an innovative approach to road management in the poorest areas of rural Peru, with the help of the World Bank and the Inter-American Development Bank.

The approach developed over a decade by the First and Second Rural Road Projects has firstly aimed at empowering the rural poor in the process of selecting those rural roads that should be rehabilitated. About one hundred provincial participatory road plans have been prepared through the organization of community workshops. These plans prioritize among road segments to identify the ones that are most critical to the needs of the poor and most likely to help spur productive activities. The project has been considering all the main transport modes of the rural poor: rural roads as well as pedestrian paths for the extreme poor and even fluvial transport for the communities living in the Amazonian regions. A "local development window" was also created to help identify productive activities that became feasible, thanks to the improvement of transport conditions.

Building on the on going decentralization reforms in Peru, the management of rural roads has been progressively handed over to provincial municipalities, along with the corresponding budgetary resources and technical expertise. Provincial road institutes have been created, under the authority of provincial road boards which include all the mayors from the province. These institutes, of which there are 38 so far, contract out the maintenance of the roads that have been created to micro-enterprises, created by men and women from the poorest rural communities. This approach has improved the efficiency of maintenance activities and also contributed to developing entrepreneurial capacity in rural areas, as well as reducing poverty. More than 500 micro-enterprises have been created, representing 5,700 employment opportunities for poor men and women. (30% of the workers are women).

As of 2005, 13,000 km of rural roads have been rehabilitated under the projects and were receiving adequate routine maintenance contracted out to micro-enterprises. The technology used for road rehabilitation (gravel roads) was about a quarter of the cost of other alternatives like paved roads. Before the projects, low cost alternatives, like

[22] Ancash, Apurimac, Ayacucho, Cusco, Cajamarca, Huancavelica, Huanuco, Ica, Junín, Pasco, Puno and San Martín.

gravel roads, were discarded because communities knew they were not going to last. After a decade of experience, communities have now learnt that gravel roads are a sustainable option, provided adequate maintenance is performed, as well as a cost-effective alternative, given the traffic observed on Peruvian rural roads.

In 2005, a thorough evaluation of the Second Rural Road Project was performed, illustrating the improvement in transport conditions (a 68% reduction in travel time) as well as its impact on access to schools (a 8% increase in enrollment) and health centers (a 55% increase in visits), agricultural productivity (a 16% increase in land destined to agriculture) and rural income (a 20% increase in men's agricultural salaries). A better trend in poverty and extreme poverty indicators was also observed in the project's areas, compared to the other areas not covered. This effect on poverty is expected to become stronger over time.

The World Bank has lent US$90 million to Peru for the First Rural Road Project and US$50 million for the Second Rural Road Project.

Source: World Bank (2005).

At the regional level, part of departmental road management is handled by the deconcentrated units (the RRDs). [23] The RRDs have an average staff of 100 to 120 people (about 2,000 people for the whole country). Their positioning remains ambiguous since, according to the Regional Government Law, they are placed under the administrative authority of the regional governments but under the functional authority of the MTC. In addition, the current organization of the regional governments includes a regional infrastructure managing unit (RIMU). [24] In most regions, the RRDs and the RIMUs are working on the same kind of issues, in a non-coordinated manner. The restructuring of these institutions is a key institutional challenge for the decentralization process. Ultimately, they should be restructured (possibly merge in a single institution, placed under the full authority of the regional governments). A Supreme Decree (*Decreto Supremo*) is under preparation to validate the *plan de transferencia* that will help clarify the responsibilities of the RRDs and the RIMUs. Between the RRDs and the RIMUs, regional governments have a significant staff involved in road management: in Cuzco, the two institutions added count with 484 people, in Junín 367 people, in Arequipa 225 people and in Huancavelica 195 people.

Until now, PVD has been handling departmental roads' rehabilitation and maintenance directly, with its own employees and equipment ("force account" model). As a consequence, the former deconcentrated units (the RRDs) still own significant stocks of mechanical equipments that could be used for road construction or maintenance. In 2004, PVD still administers 767 mechanical equipments, including 279 heavy equipments (see table). Because of obsolescence or the lack of proper maintenance, a large proportion of these equipments are out-of-order (only 58% are operational). About 80% of these equipments are over 8 years of age and their yield range between 40% and 60% of specifications.

[23] Regional Roads Directorate (*Direcciones Regionales de Transportes y Comunicaciones* in Spanish).
[24] *Gerencia Regional de Infraestructura* in Spanish.

Table: Stock of Heavy Equipment and Conditions of this Equipment.

Departamento	Amount of equipment	% operational	*Departamento*	Amount of equipment	% operational
Amazonas	6	67	Lambayeque	10	50
Ancash	11	91	Loreto	19	37
Apurimac	10	80	Madre de Dios	3	67
Arequipa	30	70	Moquegua	9	67
Ayacucho	12	50	Pasco	8	50
Cajamarca	13	69	Piura	7	43
Cuzco	17	29	Puno	10	100
Huancavelica	3	100	San Martín	11	64
Huanuco	11	91	Tacna	21	10
Ica	5	60	Tumbes	7	43
Junín	19	53	Ucayali	8	38
La Libertad	29	14			

Source: MTC / Provias Departamental.

In the context of the on-going decentralization process, 290 pieces of equipments have already been transferred to the regional governments under "cession agreements". By the end of 2004, 390 additional pieces were to be transferred. Ensuring that these equipments will not be used to support "force account" management models is a critical issue for the successful transfer of responsibilities to the regional governments. Instead, the proposed project aims at outsourcing a majority – if not all – of the regional road tasks to private construction firms or to micro-enterprises in the case of road maintenance. Based on the experience of many countries (Colombia, Bolivia), this has proved to be a more efficient approach to road management, including for dealing with emergency situations. Under this model, the RIMUs should not need any mechanical equipment at all. If this is not possible, a progressive phasing out of this equipment stock should be elaborated as well as a strong limitation to the situations when these equipment could be used (eg. some emergency cases). Finally, the specific case of the equipment that could be used to pave roads should be considered with particular attention since this may lead to wrong technology choices. Indeed, given the traffic statistics observed in most of the secondary network, only a few of the regional roads would require paving. For most of the secondary network, gravel roads with adequate maintenance would be the most cost-effective technology solution. Therefore, paving equipments are in most cases unjustified and they may provide an incentive for wrong technology choices. In addition, they may become a liability for the RIMUs since they require very costly maintenance.

B5 – Regulatory Framework and Technical Norms.

The revision of the existing legislation for road classification is under way. This reclassification was becoming necessary since there are significant inconsistencies between the level of government in charge of certain portions of the primary, secondary and tertiary networks and the functions served by certain road segments. As a result, some regional governments have been spending resources to improve the conditions of some primary roads which mostly have a regional function while they are financing the improvement of some rural roads which should be the responsibility of the local governments. A Supreme Decree *(Decreto Supremo)* [25] has been

[25] *Reglamentario de la Ley de Transporte y Tránsito, respecto de la jerarquización de las redes viales.*

drafted to make reclassification more agile and less bureaucratic. A dated covenant has been introduced to ensure such clarification of the regulatory framework.

The technical norms that are applicable to roads with low traffic volume are currently unfavorable to the development of gravel roads. More specifically, the geometric design norm (DG-2005) [26] which is consistent with gravel road technologies is valid until traffic volumes of 200 vpd. Over 200 vpd, another norm (DG-2001) [27] becomes applicable, which is mostly based under paved roads specifications. To improve the existing situation and put in place a normative framework favorable to the development of gravel roads, a dated covenant has been introduced in the loan agreement. As a result, it is expected that the DG-2001 should become only valid for paved roads while the DG-2005 would be applicable to gravel roads with traffic volumes lower or equal to 400 vpd.

C – Background on the Fiscal Situation:

C1 – Investment Needs and Levels of Capital and Recurrent Expenditures.

The fiscal situation is a significant constraint to public investment in infrastructure as shown by recent research in the region. [28] In Peru, public investment in all infrastructure sectors (ie. not only roads) has halved in value from around 2% of GDP in the 1980s to less than 1% of GDP in the 1990s. [29] In 2004, public investment in roads amounted to about 0.5% of GDP. In comparison, recent research calibrated for a sample of Latin America countries estimated that the optimum macro-economic spending levels in infrastructure were 4.0% of GDP for new public investment and 2.0% of GDP for maintenance. [30] Other works estimated that reaching an infrastructure endowment comparable to the Latin American leader (Costa Rica) would increase GDP growth by 3 percentage points. [31]

Capital investments required to restore Peru's road network to conditions aligned with traffic levels have been estimated at around US$4.2 billion. [32] More than half of the needs concern the primary network (national roads) where 70% of the network needs rehabilitation or improvement. For the secondary network (regional roads), capital investment needs have been estimated at US$1.3 billion, with 83% of the network needing rehabilitation or improvement. Finally, for rural roads, rehabilitation costs have been estimated to cost US$0.6 billion, with 76% of the registered network needing rehabilitation. The latter figure does not take into account the needs of Non-Motorized Transport (NMT) roads, non-registered rural roads (that could exceed 60,000 km), and urban roads (needs in capital investment for urban roads in Lima only have been estimated to US$0.8 billion).

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[26] *Norma de diseño geométrico para caminos de bajo volumen de tránsito.*
[27] *Norma para caminos de tercera clase.*
[28] *Source:* Calderon, C. and Serven, L. – The output cost of Latin America's infrastructure gap (2004).
[29] *Source:* Foster, V. – Peru's Infrastructure in International Perspective (2004).
[30] *Source:* Rioja, F. – Filling Potholes: macroeconomic effects of maintenance versus new investment in public infrastructure (2003).
[31] *Source:* Foster, V. *Ibid.*
[32] Source: Guerra-García, G. (2000) - *Hacia una Política de Financiamiento para el Sector Transportes en Perú*, Mimeo prepared for the Inter-American Development Bank (IDB).

Table: Capital Investment Required to Fully Upgrade Peru's Road Networks.

	Length (km)	Cost (US$ million)
National roads	**Total network : 18,081**	**Total needs : 2,277**
paved roads needing rehabilitation	3,646	739
construction of new paved roads	821	534
affirmed roads needing rehabilitation	4,995	393
affirmed roads needing to be paved	879	264
non-affirmed roads needing to be affirmed	1,800	207
other capital investment	430	140
Regional roads	**Total network : 14,260**	**Total needs : 1,330**
non-affirmed roads needing to be affirmed	7,130	948
affirmed roads needing rehabilitation	4,492	333
paved roads needing rehabilitation	228	49
Rural roads	**Total network : 46,909**	**Total needs : 598**
rural roads needing rehabilitation	35,826	598

Source: Guerra-Garcia, 2000.

Existing levels of public capital expenditures for roads are insufficient to cover these needs, particularly for regional roads. In 2004, the resources of the Ministry of Transport and Communications (including those assigned to the so-called Provias Nacional, Provias Departamental and Provias Rural) remain the main source of funding for capital investment in the road sector. These resources amount US$234 million, with US$147 million for the national network, US$45 million to regional roads, and US$20 to rural roads. Based on these current funding levels, it will take 16 years to fully upgrade the primary network, 30 years for the secondary network and 28 years for tertiary roads. It should be noted that these figures are in fact underestimated since roads—under proper maintenance—requires rehabilitation every 10 to 15 years and that therefore, some of the early rehabilitated segments would have to be rehabilitated again (as well as the roads which are currently in good conditions).

Budget resources for road maintenance are also insufficient to prevent network deterioration, which increases the cost of rehabilitation. Given the existing conditions of the network, current expenditures' needs are only partially covered by budget resources, particularly for regional roads and rural roads for which less than half of the needs are covered. Insufficient maintenance accelerates roads' degradation, making rehabilitation more costly. When roads are rehabilitated or improved, the cost of maintenance increases but the frequency of rehabilitation requirements decreases (a road which is not maintained will need to be rehabilitated every 4 to 7 years compared to 10 to 15 years for a road well maintained). In 2004, some routine maintenance activities on the secondary and tertiary networks have been transferred to regional and local governments.

Table: Current Expenditures Needed for Road Maintenance and Comparison with Actual Resources.

US$ million	National roads	Regional roads	Rural roads
Maintenance needs			
given present conditions of network	103	31	41
assuming full rehabilitation and improvement	136	60	129
Current expenditures for maintenance			
MTC maintenance budget (2004)	67	6	
Regional/local governments budget (2004)		7	10
Current expenditures' needs covered by resources			
given present conditions of network	65%	42%	24%
assuming full rehabilitation and improvement	49%	22%	8%

Sources: MTC revised budget 2004, Provias Rural budget 2004, Guerra-Carcia, 2000.

C2 – Sector-generated Resources

Revenues generated through road users' charges and fees have exceeded road expenditures. According to an analysis undertaken in 2000, [33] these revenues amounted to an annual average of about US$570 to US$600 million in the period 1997-1999. No estimation is yet available for subsequent years but the amounts should be at a similar level or higher if a normal increase in mobility (number of vehicles, average distance per vehicle) has taken place. Table 3 shows that, in the period 1997-1999, revenues exceeded road expenditures by 71%, 25% and 82% in those three years. If an overall value-added tax (IGV in Spanish) of 14% is discounted from all the revenue sources, these percentages become 47%, 7% and 56%. However, it should be noted that urban roads are not included in these estimations for road expenditures.

Table: Revenues from Road-users' Charges and Fees.

US$ million	Collecting agent	1997	1998	1999
Gasoline tax	General budget	218	221	242
Diesel tax	General budget	212	212	211
Vehicle Registration Tax	Municipalities	24	19	20
Metropolitan Lima Tolls	Lima municipality	25	27	22
National roads' tolls	MTC	40	26	38
Driver licence fees	MTC			
Vehicle purchase tax	General budget	69	67	68
Driving fines and penalties	Regions			
Total revenues		**589**	**572**	**601**
MTC budget		316	420	305
Total road expenditures (does not include expenditures on urban roads)		345	459	331

Sources: PAD Second Rural Roads Project (World Bank, 2001)

C3 – Financial Capacity of the Regional Governments.

An assessment of the financial capacity of regional governments has been performed by Provias Departamental on the basis of expenditures observed during the period 2002-2004. Over the last three years, regional governments' expenditures in transport represented about US$28 million in capital investment (mostly road rehabilitation) and US$6.9 million in current expenditures

[33] Guerra-Garcia, 2000.

(mostly road maintenance). Based on this assessment, it can be estimated that, globally, the regions could bring about US$120-130 million of counterpart funding for road rehabilitation over the next 4 years, just by sustaining past levels of investment. For road maintenance, regional counterpart funding could reach about US$28-30 million for the next 4 years. These levels could even be greater assuming that the overall budget of the regions will grow over the coming years along with the gradual implementation of the decentralization process, and the possible (though limited) re-allocation of more funding to the road sector (during the period 2002-2004, the regions have spent only 2 to 3% of their overall budget in road rehabilitation or maintenance).

In comparison, the proposed project has a total cost of US$160 million for road rehabilitation and US$15 million for road maintenance for 4 years, of which 50% would be brought by counterpart funding (ie. US$80 million for road rehabilitation and US$7.5 million for road maintenance). Globally, the assumption of 50% of regional counterpart funding should therefore be compatible with the financial capacity of the regional governments.

Table: Regional Governments' Expenditures in Transport (2002-2004, US$ thousand).

Departamento	**Transport capital expenditures**				**Transport current expenditures**			
	2002	2003	2004 (jan-sep)	average	2002	2003	2004 (jan-sep)	average
Amazonas	257	1,600	943	1,038	9	49	54	43
Ancash	514	571	1,029	819	46	114	237	159
Apurimac	286	657	286	441	249	660	500	525
Arequipa	400	1,743	2,114	1,654	329	1,097	843	850
Ayacucho	914	943	486	835	257	723	529	562
Cajamarca	943	514	1,314	1,070	23	74	80	68
Cusco	886	1,857	943	1,333	226	531	400	430
Huancavelica	1,343	3,086	1,400	2,098	303	760	574	610
Huanuco	229	1,829	629	965	91	211	169	176
Ica	314	257	86	229	174	434	343	355
Junín	571	1,971	1,171	1,368	140	371	260	286
La Libertad	114	486	257	314	154	506	394	395
Lambayeque	0	114	229	140	134	354	17	170
Lima	0	86	57	54	0	0	0	0
Loreto	7,743	5,229	7,343	7,587	229	617	549	526
Madre de Dios	229	343	286	317	40	97	111	95
Moquegua	57	857	314	444	77	189	146	153
Pasco	114	2,057	371	889	46	146	111	113
Piura	314	800	914	778	154	409	334	336
Puno	714	1514	1,371	1,352	163	443	351	358
San Martín	29	1629	2,200	1,530	157	340	249	276
Tacna	23	2,029	914	1,090	77	226	160	172
Tumbes	0	200	286	194	94	240	177	190
Ucayali	1,486	1,429	1,171	1,492	20	34	23	28
TOTAL	**17,486**	**31,800**	**26,057**	**28,010**	**3,200**	**8,629**	**6,629**	**6,889**

Source: MTC.

Nevertheless, there exist significant disparities across the various regions. Therefore, a critical issue for the project design is to ensure that the methodology used to set the length of the secondary network to be rehabilitated and maintained under the project in each region is compatible with the financial capacity of regional governments. Based on the average

rehabilitation cost of US$50,000 per km, the table below shows the maximum length of regional roads that could be rehabilitated under the project in each region, based on a 50% regional counterpart funding (and no constraint on external borrowing). Based on these assumptions, some regions (Loreto, Madre de Dios, San Martin) have sufficient counterpart funding to rehabilitate their entire secondary network. On the other hand, other regions have a much more limited financing capacity: La Libertad could only finance the rehabilitation of 50 km of regional road (6% of total secondary network), Tumbes the rehabilitation of 31 km (10% of the network) and Ica the rehabilitation of 37 km (11% of the network).

Departamento	Annual counterpart funding (US$ thousand)	Length of the secondary network (km)	Maximum possible rehabilitation work (km)	Maximum % rehabilitable
Amazonas	1,038	408	166	41
Ancash	819	1,067	131	12
Apurimac	441	544	71	13
Arequipa	1,654	1,417	265	19
Ayacucho	835	891	134	15
Cajamarca	1,070	739	171	23
Cusco	1,333	1,730	213	12
Huancavelica	2,098	737	336	46
Huanuco	965	414	154	37
Ica	229	336	37	11
Junín	1,368	590	219	37
La Libertad	314	886	50	6
Lambayeque	140	104	22	22
Lima	54	458	9	2
Loreto	7,587	387	1,214	314
Madre de Dios	317	46	51	110
Moquegua	444	188	71	38
Pasco	889	621	142	23
Piura	778	578	124	22
Puno	1,352	1,155	216	19
San Martín	1,530	173	245	142
Tacna	1,090	483	174	36
Tumbes	194	318	31	10
Ucayali	1,492	0	239	-
TOTAL	**28,010**	**14,270**	**4485**	**31**

C4 – External Borrowing Scenario.

In the last 15 years, external borrowing has brought at least US$1.2 billion to the sector (about US$800 millions from IDB, 140 from the World Bank and at least 250 from the CAF). These loans have been focusing on particular segments and/or policy reforms for one of the three road networks (primary/secondary/tertiary). Some years, external resources have brought up to 60% of total resources for certain road programs (e.g. rural roads in 2004). Other years, they represented less than 5% of total resources (e.g. departmental roads in 2004). On the other hand, allocation of ordinary budgetary resources to the various road programs has been largely volatile. Thus, while cost recovery in the sector does not appear to be an issue (revenues exceed expenditures), actual funding for the various road programs is highly dependent on budgetary decisions and external borrowing, with marked volatility in the case of maintenance.

Due to fiscal constraints and the government's priorities, the overall funding for the transport sector from external resources is planned to decrease in the coming years with a reallocation of

those resources within the sector. MEF simulations for 2004-2009 (Table 4) show a decrease of external resources (i.e., loans from multilateral institutions) for the transport sector, even though disbursements of foreign loans are expected to increase from US$450 million in 2004 to US$500 million from 2005 and beyond. These simulations show a significant reallocation of external funding between the three networks, as follows:

a. external resources for national roads are expected to decrease gradually (from US$73 million in 2004 to US$30 million in 2008-2009), with the difference to be taken over by tapping private sector resources (through concessions);

b. secondary roads are expected to attract an increasing number of external resources from the now under preparation Regional Transport Decentralization Project—up to US$36 million in 2008—to strengthen the competitiveness position of the regions and support the institutional development of regional governments in managing the road networks under their jurisdiction;

c. funding for rural roads would decrease in 2006-2007, upon the completion of the on-going WB-IDB co-financed Rural Roads Program, before regaining previous levels by 2008 (with the expectation that another program supported with external resources would be under implementation—this time within a fully decentralized framework and provincial and district municipalities bringing increased levels of counterpart funding).

Table: Projection of External Resources Available for the Road Sector.

US$ million	2004	2005	2006	2007	2008	2009
National roads	73	62	54	40	30	30
Regional roads	0	11	22	28	36	8
Rural roads	26	26	11	6	24	24
Total external resources for transport	101	99	87	74	90	62
Total external resources for all sectors	450	500	500	500	500	500
Share of total resources for transport	22%	20%	17%	15%	18%	12%

Sources: MTC revised budget 2004, MEF Office of Multi-Annual Programming 2004.

This fiscal framework for external resources could be significantly modified if major transport infrastructure projects (eg. *Transoceanica* project with possible CAF funding) were to be launched. No fiscal impact on MTC budget is currently expected from the newly-approved Guarantee Facility although this could change if the subsidies related to some road concession projects were to be affected to the MTC budget.

C5 – Fiscal Framework for the Regional Transport Decentralization Project

Conversations with the MEF (Office of Public Sector Multi-Annual Programming), based on a policy of internal fiscal neutrality, ordinary budget resources are not expected to compensate for the decrease of external resources. Moreover, the decentralization process to local and regional governments (with the corresponding transfer of budgetary resources) may ultimately produce a reallocation of internal funding across sectors but it is unlikely to lead to a major increase of resources for transport. This scenario means that the external resources from the possible WB-

IDB loans to support the regional transport decentralization initiative are not additional to the budget, but rather they would be reallocated to other sectors.
Within the sector, therefore, the proposed jointly-financed WB-IDB Regional Transport Decentralization Project would benefit from the current allocation of external resources for 2005-2009, resulting in a clear additionality of funds to the sub-sector. The loan resources from the World Bank and the IDB amount to US$100 million, with a similar amount of counterpart funding. The debt would be assigned to the Ministry of Transport and Communications (MTC)—making the loan resources a grant to the regions—while the regional governments would have to take up the counterpart funding in line with the interventions within their corresponding jurisdictions. If these external funds did not materialized the regions would be left to themselves to address the needs of their networks and the incentive scheme for institutional strengthening and efficient road management that the blend mechanism (of debt and counterpart funding) would bring about could not be implemented.

C6 – Long Term Fiscal Vision for the Sector

There is currently a significant resource gap for the road sector in Peru. The fiscal pressure, the insufficient attractiveness for private sector participation and, in certain cases, the low efficiency of transport-related public expenditures are major reasons behind this gap. Compared to a scenario aiming at efficiently upgrading the entire Peruvian road network over a 10 year period, there is, in 2005, an estimated gap of US$176 million.

Table: Needs and Resources for the Road Sector in 2005.

network	expenditures	Needs *	private resources **	public resources			total resources	gap
				national	regional	local		
Primary	Capital	228	50	147			197	31
	Current	103	25	67			92	11
Secondary	Capital	133		45	28		73	60
	Current	31		6	7		13	18
Tertiary	Capital	60		20		15	35	25
	Current	41				10	10	31
TOTAL		**596**	**75**	**285**	**35**	**25**	**420**	**176**

* assuming full rehabilitation of the Peruvian road network over a 10 year period.
** estimated

In 2010, a realistic objective for the Peruvian authorities should be to close the resources' gap by attracting more private capital in the road sector (for the primary and secondary networks, the Guarantee Facility is expected to help promote such a participation and for the tertiary network, some industries – mining in particular – have already expressed their interest in contributing to the upgrading of some rural roads that are critical to their activities). In addition, the success of the decentralization process (and some additional deepening of fiscal decentralization) should help convince local and regional governments to bring more resources in road assets' management, particularly in maintenance. All resources for maintenance activities available in the national government's budget should be transferred to the relevant sub-national level of government by that time. The MTC budget should only be used to channel external resources that can be transferred to the lower levels of governments to co-finance capital expenditures in road improvement.

Table: Fiscal Vision for the Road Sector in 2010.

network	expenditures	Needs *	private resources **	public resources			total resources	gap
				national	regional	local		
Primary	Capital	228	81	147			228	0
	Current	120	53	67			120	0
Secondary	Capital	133	23	35	75		133	0
	Current	45	10		35		45	0
Tertiary	Capital	60	8	25		27	60	0
	Current	85	2			83	85	0
TOTAL		**671**	**177**	**274**	**110**	**110**	**671**	**0**

* assuming full rehabilitation of the Peruvian road network over a 10 year period (half completion in 2010).

** estimated, with the help of the Guarantee Facility for the primary and secondary networks and with private participation in financing of rural roads' upgrading (mining industries in particular).

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

PERU: Regional Transport Decentralization

Sector Issue	Project	Latest Supervision (PSR)
World Bank-financed		(IP) (DO)
Improve the access of rural poor to basic social services, market integrating infrastructure and income-generating activities with gender equity, to help alleviate rural poverty and raise the living standards of rural communities	WB/IDB: Second Rural Road Project	S S
Provide a well integrated and reliable rural road system through rehabilitation and maintenance of rural roads and key connecting links to the primary road system.	WB/IDB: Rural Road Rehabilitation and Maintenance Project	OED ratings: Outcome: HS Bank perf.: HS Borrow. Perf.: HS
(1) rehabilitate essential transport infrastructure; (2) assist Government in implementing institutional reforms in the road and railway subsectors, aiming at improved resource use and sustainable development; and (3) lay the ground work for future projects focusing on strengthened road management, increased private participation in the transport sector, and improved mobility of the poor.	Transport Rehabilitation Project	ICR ratings: Outcome: S Bank perf.: S Borrow. Perf.: S
Assist the Municipality of Metropolitan Lima (MML) in enhancing the economic productivity and the quality of life within the Lima Metropolitan area through improving mobility and accessibility for the metropolitan population, especially in the peri-urban poor neighborhoods by establishing an efficient, reliable, cleaner and safer mass rapid transit system.	WB/IDB: Lima Urban Transport Project	(Implementation has just started and no rating is available yet)
Assist the GOP to: (i) establish a more streamlined, integrated and effective institutional and policy framework to increase nontraditional exports, and (ii) develop and implement initiatives designed to foster the entrance of new export market participants, especially small and medium producers.	Trade Facilitation and Productivity Improvement Technical Assistance Project	S S
Pioneer public private partnerships in Peru for infrastructure projects. The GOP has identified enormous infrastructure investments, required to bring average coverage levels to adequate standards, decrease coverage gaps and inequity, and improve the country's competitiveness by reducing logistical costs.	Guarantee Facility Project	Approved by the Bank in April 2005

Other Development Agencies (i) develop an extensive region of the Peruvian highlands by improving its road infrastructure and linking it to the more dynamic economy of the coast; (ii) improve the programming of road investments; (iii) encourage private involvement through the promotion of highway concessions; and (iv) boost MTC's institutional capacity. Support investment program for a major toll road concession in the Lima metropolitan area.	IDB: Highway Rehabilitation and Improvement Project – Phase III IDB: Hancón-Huacho-Pativilca Toll Road Project	

Second Rural Road Project (WB/IDB) [P044601] *(approved in 2001; on-going)*
The objective of the Second Rural Roads Project in Peru, is to increase access to basic social services, and to economic, and income-generating activities, to help alleviate rural poverty. The components consist of: 1) finance roads rehabilitation, to improve accessibility to rural areas, and restore operating conditions along regional economic corridors. Unpaved primary, and secondary roads were selected for rehabilitation, to be integrated into the consolidated road network; 2) routine, and periodic maintenance of rural roads, and connecting primary, and secondary roads were strengthened, based on a co-financing arrangement between the central government, and benefited local governments; 3) improve the non-motorized rural transport, by providing technical assistance for village-level infrastructure management, to include community participation in the planning, and implementation of works; 4) pilot an institutional model for managing the rural road network at the provincial level, whose municipal authorities jointly assume responsibility over the development of a core provincial road network. This allowed to avoid current institutional, and financial segmentation, that could have prevented municipalities from undertaking integrated initiatives, or responsibilities; 5) pilot the development of strategic frameworks for improving rural accessibility in the Selva region. The pilot ascertained technical, institutional, environmental, and economic guidelines to set an inter-modal transportation system along rivers; and, 6) further develop the institutional building program, already underway, to improve rural transport policy, and strategies; to improve planning, and management of rural roads; and, to develop community-based micro-enterprises for road maintenance.

Rural Road Rehabilitation and Maintenance Project (WB/IDB) [P037047] *(approved in 1995; closed in 2000)*
The overall purpose of the Rural Road Rehabilitation and Maintenance Project was to provide a well-integrated and reliable rural road system through rehabilitation and maintenance of rural roads and key links connecting to the primary road system. This has helped alleviate rural poverty and raise living standards of rural communities through increased access to basic social and economic and income-generating activities. The specific objectives were to: 1) reduce transport costs and raise the reliability of vehicular access to expand markets for agricultural and non-farm products; 2) integrate poorly accessible zones with regional economic centers; 3) improve transport conditions in rural villages; 4) generate employment through the rehabilitation and maintenance of rural roads to mitigate rural poverty; and 5) build up institutional capacity at local government levels and develop small and medium enterprises to manage and carry out, on a sustainable basis, the maintenance and upgrading of rural roads. The project consisted of the

following six components: 1) rehabilitation of rural roads; 2) rehabilitation of connecting primary and secondary roads; 3) routine maintenance of rural roads; 4) improvement of village streets; 5) improvement of non-motorized rural transport; and 6) institutional development which includes: a) technical assistance to improve planning and management of rural roads; b) studies on local road management practices and rural road financing; c) technical assistance to develop micro-enterprises formed by groups of beneficiaries for road maintenance; and d) technical assistance and training services to strengthen the local road construction industry.

Transport Rehabilitation Project (WB) [P008045] *(approved in 1994; closed in 2000)*
The Transport Sector Rehabilitation Project's main objectives were to: (i) rehabilitate essential transport infrastructure; (ii) assist Government in implementing institutional reform in road and railway subsectors; and (iii) lay the ground work for future projects focusing on strengthened road management, increased private participation in the transport sector, and improved mobility of the poor. The project consisted of five components, the most important concerning road rehabilitation. Six roads totaling 725 km were rehabilitated under the project. In addition, this component included: (i) a bridge program involving the acquisition and recovery of Bailey bridges and the reconstruction of derelict old bridges; (ii) a pilot maintenance program focusing on 620 km of road in a specified corridor; and (iii) a traffic safety program. In parallel, the project supported government efforts to rebuild an institutional structure capable of maintaining the road system. The second component helped to privatize and rehabilitate the railway, by: (i) reducing staff redundancy; (ii) rationalizing railway debt; (iii) closing down or receiving budgetary transfers from the Government for unprofitable services; and (iv) rehabilitating track, telecommunications and locomotives to keep the railway in operating condition while the privatization process is underway. The third component concerned the rehabilitation of Lima's airport runway which was in urgent need of repair, before it becomes in danger to aviation. The fourth component was a pilot project for non-motorized transport in Lima to test methods of promoting the use of bicycles by low-income residents. The fifth component, technical assistance and training, aimed at; (i) strengthening the institutional capacity for managing roads and bridges, and supporting the creation and fostering of an autonomous agency responsible for planning, operating, financing, and administering the highway network; (ii) building capacity to manage environmental issues; and (iii) assisting the railway in its privatization and improving its management.

Lima Urban Transport Project (WB/IDB) [P035740] *(approved in 2003; on-going)*
The main objective of the project is to assist the Municipality of Metropolitan Lima (MML) in enhancing the economic productivity and the quality of life within the Lima Metropolitan area through improving mobility and accessibility for the metropolitan population. The project has the following six components: Component 1) comprises primarily infrastructure works to implement the busways along existing road corridors: (i) construction of 28.6 km of segregated busways; (ii) repaving of mixed-traffic lanes adjacent to the new busways; (iii) traffic signal improvements, signposting and road markings along the corridors; (iv) bus stations and terminals; (v) bus depots and workshops; (vi) control center; (vii) paving and other improvement of feeder roads to the two bus terminals; (viii) road safety measures along the corridors, its feeder roads, and the streets in its area of direct influence; and (ix) improvements to pedestrian and vehicular corridors, pedestrians and busway users. Component 2) comprises three activity areas: (i) community consultation and education; (ii) mitigation of the negative impacts on some

current bus operators; and (iii) financial support during the initial months of busway operations. Component 3) addresses the regulatory, monitoring, and control functions of urban public transport and supports: (i) the development and implementation of a public transport policy, including its regulatory and policy-setting framework, as well as its administration, operation, monitoring and control; (ii) the formal creation, technical assistance and training of PROTRANSPORTE, the entity responsible for implementing the busway operations; (iii) technical assistance and training of EMAPE, the entity responsible for implementing the physical works under the Project; (iii) technical assistance and training of DMTU and the national police; and (iv) monitoring and evaluation of the busway operation and the Project. Component 4) this includes (i) supervision of the physical works described above; and (ii) economic feasibility and environmental studies as well as the preparation final engineering designs to expand the busway network beyond the 28.6 km funded by the Project. Component 5) this component, entirely to be financed from counterpart funds, includes the operational expenses of the institutions responsible for administering the Project and for implementing the busway operations. Component 6) later in 2003, MML will initiate the re-construction at the Plaza Grau, one of Lima's busiest intersections and a key node of the busway to be financed under the Project.

Trade Facilitation and Productivity Improvement Technical Assistance Project (WB) [P077788] *(approved in 2003; on-going)*
The Trade Facilitation and Productivity Improvement Technical Assistance Project development objectives are to assist the GOP in: (a) establishing a more streamlined, integrated, and effective institutional, and policy framework to increase nontraditional exports; and (b) developing, and implementing initiatives designed to foster the entrance of new export market participants, especially small and medium producers. The project would achieve these objectives by providing technical assistance to: (1) elaborate and implement a national plan to improve Peru's competitiveness drawing from locally-generated regional strategies, and partnerships with the private sector; (2) strengthening mechanisms of interaction, and cooperation between private, and public parties at regional, national, and local levels; (3) disseminating information, and training to the private sector, and selected public sector institutions; (4) conducting pilot and small scale initiatives to test alternative schemes to improve quality, and productivity; (5) analyzing new market opportunities, instruments for trade facilitation, inefficiencies in the distribution chain, and export processing, and, preparing design, and feasibility studies for infrastructure bottlenecks in transport logistics; and (6) refocusing, and overhauling key, public sector entities to achieve their institutional objectives, and boost Peru's competitiveness.

Guarantee Facility Project (WB) [P088923] *(approved in 2005; on-going)*
Peru faces strong challenges in all its infrastructure sectors, including (i) insufficient productive infrastructure; (ii) low and inequitable infrastructure coverage; and (iii) inadequate quality of service. To eliminate identified infrastructure shortages, huge investments are needed in all sectors: to date, the Government of Peru (GOP) has identified investment needs of over $18 billion in projects in the transport, energy, water and sanitation and telecommunication sectors. The GOP plans, whenever possible, to implement and fund future infrastructure investments via Public-Private Partnerships (PPPs) combining the benefits of private sector management and funding wit public sector contributions. ProInversión, the Peruvian private investment promotion agency, has identified a first phase of about 15 projects requiring over $1.5 billion of investments in the transport, energy, water and sanitation and telecommunication sectors over the next three

years that could be developed under PPP arrangements. The Guarantee Facility project aims at maximizing the attractiveness of Peru's future infrastructure projects to private investors so as to make them suitable for PPP development, maximize private sector funding and minimize the required public contributions. This will be achieved by providing IBRD Partial Risk Guarantees (PRGs) to protect private project debt against various risks, including political risks and backstopping government obligations under the projects.

Highway Rehabilitation and Improvement Project – Phase III (IDB) *(approved in 1998; on-going)*
The program will finance: (i) road investments in the highland departments of Junín, Cusco, Huancavelica and Ayacucho, specifically rehabilitation of the sections Cusco-Combapata and Huancayo-Imperial-Izcuchaca, improvement and rehabilitation of the Ayacucho-Imperial road, and construction of bypasses at La Oroya and Urcos; (ii) preinvestment studies and works supervision; (iii) government investment in a highway concession project; and (iv) support for the MTC's sector planning and policy-making capacity and revision of the organization and operations of its different highway agencies.

Ancón-Huacho-Pativilca Toll Road Project (IDB) *(approved in 2003; on-going)*
The Ancón-Huacho-Pativilca system is the only access to greater metropolitan Lima from the north of Peru. The vast majority of traffic is associated with movements of goods to-and-from production in the north to metropolitan Lima and the nearby Port of Callao, the largest port facility in Peru. IDB has been approached by Norvial S.A. pursuant to its successful bid to expand and improve the Ancón-Huacho-Pativilca Highway System previously known as *Red Vial 5*. The 182.7 km System will be developed under the terms and conditions of a 25-year Build-Operate-Transfer (BOT) concession by the *Ministerio de Transportes y Comunicaciones* (MTC) and administered by the independent oversight commission, *Organismo Supervisor de la Inversión en Infraestructura de Transporte de Uso Público* (OSITRAN). The concession was awarded to the Company in May 2002 and signed by the Company on January 15, 2003. The Project to be supported by the Bank will consist of the first of two phases of investment to take place during the 25-year Concession. "Phase I," to be financed by the Bank, is to be completed in the first three years of the Concession and involves the construction of bypass roads, additional local lanes in critical points and the addition of accesses and intersections to improve traffic safety.

Annex 3: Results Framework and Monitoring

PERU: Regional Transport Decentralization

Results Framework

PDO	Outcome Indicators	Use of Outcome Information
Improve—through decentralization at the regional level—the prioritization, efficiency and effectiveness of regional transport interventions and, hence, their contribution to regional development and poverty reduction in Peru.	Increase in the use and quality of regional transport infrastructure, as measured by: • decreased transport tariffs along upgraded regional roads • % of the secondary network in good condition	Assess impact of improved regional road infrastructure on users' behaviors and on regional mobility Assess impact of improved regional road infrastructure on the affordability of transport services and, therefore, on improving access to social services and economic centers
Intermediate Results One per Component	**Results Indicators for Each Component**	**Use of Results Monitoring**
Component One: *Participatory regional road planning*: participatory regional road plans are finalized and approved in each eligible region following agreed methodology and eligibility criteria	**Component One:** Number of participatory regional road plans approved by the regional council or the competent commission of the regional council , in line with agreed standards, including (1) prioritization of regional roads which are the most relevant to regional development; (2) alignment with other relevant planning instruments (such as the PCDRs); (3) evidence of participatory approach; and (4) comprehensiveness of plans (design studies, road construction, road maintenance, road upgrading, road safety, environmental protection, monitoring and information).	**Component One:** Test the actual interest and capacity of regional governments to identify the regional road segments which are the most relevant to regional development Ensure consistency between regional road planning and the various existing planning instruments at the regional level (in particular the PCDRs) Verify quality and comprehensiveness of the proposed plans Assess strengthening of planning capacity at the regional level, which would be a substantial contribution to the overall decentralization agenda
Component Two: *Road upgrading*: rehabilitation of 2,200 km of regional roads prioritized through participatory planning and periodic maintenance of 2,706 km of regional roads rehabilitated by Provias Rural and transferred to regional governments	**Component Two :** Number of km of regional roads prioritized through participatory planning and rehabilitated according to agreed standards (in particular through contracting of private firms, and by choosing a cost-effective rehabilitation technology) Number of km of regional roads rehabilitated by Provias Rural and transferred to regional governments, undergoing periodic maintenance	**Component Two:** Verify implementation of proposed regional road improvement program Verify that upgraded infrastructure have been prioritized according to agreed methodology (eg. participatory planning) Ensure that cost-effective technologies are used (in particular gravel roads vs. paved roads)

	according to agreed standards (in particular through contracting of private firms and by choosing a cost-effective maintenance technology)	Verify contracting out of rehabilitation and periodic maintenance works
Component Three: *Road maintenance*: routine maintenance of 2,200 km of regional roads rehabilitated under component two, plus 2,706 km of regional roads undergoing periodic maintenance under component two	**Component Three:** Number of km of regional roads receiving routine maintenance according to agreed standards (outsourcing to micro-enterprises or small firms) Number of micro-enterprises created Number of unskilled jobs created	**Component Three:** Verify that the outsourcing of the maintenance activities actually replaces the traditional "force account" approach Detect possible difficulties with the sustainability of the financing dedicated to routine maintenance of regional roads Assess impact of the project on employment generation and entrepreneurial capacity
Component Four: *Institutional strengthening*: implement a sound, sustainable and agile institutional framework in each of the eligible region	**Component Four:** Proportion of regional governments which have successfully implemented the reforms described in their institutional agreements.	**Component Four:** Ensure that sufficient technical and management capacity is developed at the regional level, which would be a substantial contribution to the overall decentralization agenda Verify restructuring of the existing institutional framework which should be replaced by a clarified, truly decentralized, framework. Detect possible difficulties regarding the transition from a "force account" approach to an outsourced one

Arrangements for Results Monitoring

Outcome Indicators	Baseline	Target Values					Data Collection and Reporting		
		YR1	YR2	YR3	YR4	YR5	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
Increase in the use and quality of regional transport infrastructure, as measured by:									
• decreased transport tariffs along upgraded regional roads	n/a		5%		10%		Mid-term and end of program for a representative number of roads	Field surveys	PVD contracts specialized consulting firm
• % of the secondary network in good conditions	15%	20%	25%	30%	35%		Annual for the entire secondary network	Regular road conditions' monitoring by PVD	PVD in close coordination with regional governments
Results Indicators for Each Component									
Component One : Number of participatory regional road plans approved by the regional council or the competent commission of the regional council, in line with agreed standards	8	19	20				Annual for all the eligible regions	Regular project implementation monitoring by PVD	PVD in close coordination with regional governments
Component Two : Number of km of regional roads prioritized through participatory planning and rehabilitated according to agreed standards	0	500	850	1,500	2,200		Annual for the entire rehabilitated network	Regular project implementation monitoring by PVD	PVD in close coordination with regional governments
Number of km of regional roads rehabilitated by Provias Rural and transferred to regional governments, undergoing periodic maintenance according to agreed standards	0	700	2,000	2,400	2,700		Annual for the entire periodically maintained network	Regular project implementation monitoring by PVD	PVD in close coordination with regional governments
Component Three: Number of km of regional roads receiving routine maintenance according to agreed standards	2,706	3,200	3,500	4,200	4,900		Annual for the entire maintained network	Regular project implementation monitoring by PVD	PVD in close coordination with regional governments
Number of micro-enterprises created	100	115	130	155	180		Annual for all the eligible regions	Regular project implementation monitoring by PVD	PVD in close coordination with regional governments
Component Four: Proportion of participating regional governments which have successfully implemented the reforms described in their institutional agreements	0	30	60	90	100		Annual for all the eligible regions	Regular project implementation monitoring by PVD	PVD in close coordination with regional governments

Annex 4: Detailed Project Description

PERU: Regional Transport Decentralization

The project will include the following four components:

Component 1 – Preparation of participatory regional road plans (US$10.90 million of which US$5.45 million financed by the Bank loan)

A major argument for adopting a decentralized approach to road planning is that local and regional stakeholders are more likely to know which local and regional transport infrastructure, if improved, could have the most significant impact on welfare. In fact, this participatory approach can help improve dramatically the *prioritization* of the project's interventions. Such an approach has already been successfully experimented in Peru for the local participatory planning of the tertiary network's rehabilitation program (Second Rural Road Project). In addition, a territorial approach to development planning is also promoted by the Peruvian Government in order to identify – through a participatory approach – the strengths and weaknesses of a particular territory (district, province, regions) and to prioritize among possible alternatives for public investment. Road planning is an important sub-component of these more comprehensive Participatory Regional Development Plans (PCDRs in Spanish). The objective of this component is to use a similar approach at the regional level for the secondary road network, in order to identify, through participatory planning, the regional road segments which are critical to regional development.

This component include sub-component 1-A (preparation and updating or the participatory regional road plans) and sub-component 1-B (technical and feasibility studies for the upgrading of specific road segments).

Sub-component 1-A would finance the preparation of participatory regional road plans—aligned with the existing regional development plans—and elaborate a diagnosis of the sector in a particular region, analyze the supply and demand for transport services and infrastructure, and prioritize and evaluate road investment options, towards identifying the sub-project priorities that could be funded under the project. A prioritizing methodology, [34] including a combination of both economic potential and poverty level criteria, has been prepared as part of project preparation, with due attention to environmental and social issues. This methodology has build on other current experiences in the country (e.g., Peru Rural Roads or Pronasar) and proven modeling instruments (such as HDM-4 and RED). Regional road plans cover the entire life cycle of road management: they describe the timetable of activities for: (1) design studies for road civil works; (2) road construction; (3) road maintenance; (4) road rehabilitation and improvement; (5) road safety; (6) environmental protection; and (7) monitoring and information management. In order not to become outdated, Participatory Regional Road Plans should be updated at least every 5 years.

[34] *Metodología para la formulación, evaluación y actualización de los planes viales participativos.*

In each region, the participatory planning is coordinated by the planning unit of the regional government. This unit is responsible for performing the detailed assessment of the region's socio-economic situation and to manage the participatory process (eg. organizing the prioritization workshop) in close partnership with the main regional stakeholders. This unit is also responsible of preparing the PCDR and, therefore, consistency is ensured with the main territorial planning instrument. Coordination is also performed with the other levels of government (local and national). In order to ensure political ownership, the various phases of the plans are validated by the elected regional council (or by a specific commission designated by the council).

During project preparation, regional and central governments' staff were trained in using this methodology. Several workshops were also organized to facilitate the exchange of experience between the various planning units and to monitor progress achieved. Thirteen *departamento* volunteered early 2004 to prepare their road plan under the guidance of a consultant (eight financed by a PHRD grant and five by the CAF). As of March 2005, six of these PVDP had been completed and were about to be approved by the regional councils. The seven remaining PVDP started the process at the end of 2004. For the eleven remaining *departamentos*, as of March 2005, a group of eight additional *departamentos* were about to initiate the preparation of their PVDP, with funding from the PHRD grant. The opportunity to prepare PVDP for the remaining three *departamentos* (Ucayali, Madre de Dios and Lima) would be further explored during project implementation.

Table: Sequencing of the Various Regions to Prepare their Plans.

First group (planning initiated early 2004 and completed early 2005)	Second group (planning initiated end of 2004)	Third group (remaining *departamentos*)
San Martín	Tumbes	Ancash
Ayacucho	Piura	Apurimac
Ica	Junín	Huncavelica
Cuzco	Cajamarca	Huanuco
Arequipa	Pasco	Lambayeque
La Libertad	Loreto	Lima
	Amazonas	Madre de Dios
		Moquegua
		Puno
		Tacna
		Ucayali

Source: Provias Departamental.

The component would build on the work done during preparation with the final objective of having fully operational participatory regional road plans in the greatest number of *departamentos*. Some resources could also be dedicated during project implementation to revise or update some of these plans (the 8 earliest plans will have completed 5 years by the end of the project and should therefore be updated). Eligible expenditures will include for example (1) the technical assistance provided by consultants to facilitate the participatory planning process; (2) the organization of participatory events (such as prioritization workshops); (3) the training of the regional planning units; (4) dissemination costs (publication of the plans or of planning

handbook); (5) organization by Provias Departamental of coordination events (to facilitate exchange of experience between the various regions and to monitor results); (6) costs related to the revision or updating of some plans; and (7) specific tasks related to the monitoring, the evaluation or the methodological revision of the plans (eg. to better align them with the life cycle of roads or to improve the physical and financial planning of activities prioritized under the plans).

Sub-component 1-B will finance the feasibility and design studies for the rehabilitation or periodic maintenance of road segments prioritized through the participatory regional road plans. These studies currently include (1) "profiles" (preliminary description of the works); (2) pre-feasibility studies; (3) feasibility studies; and (4) complete design studies. Once the pre-feasibility study is performed, the project has to be approved by the SNIP. The full preparation process for these studies currently exceeds one year but a simplification process is under way that could reduce this process to 10 to 11 months. The envisaged process would still include the "profiles" (2 to 3 months), the pre-feasibility studies (3 months), the SNIP approval (1 month) but the feasibility and the complete design studies would be merged (3 to 4 months). In the future, the simplification process may also lead to the merging of the "profiles" and the pre-feasibilities. This component would also finance studies related to the social and environmental safeguards of rehabilitation or periodic maintenance works (eg. environmental impact evaluations).

Component 2 – Upgrading of regional roads (US$138.83 million of which US$34.71 million financed by the Bank loan)

The upgrading of the conditions of the secondary road network is a necessary condition to develop the mobility of goods and persons at the regional level and to promote rural-urban linkages that could contribute to economic growth and poverty reduction. This component will contribute to the project's overall *effectiveness* in promoting regional growth and reduce poverty through the rehabilitation and periodic maintenance [35] of about 4,900 km of regional roads (ie. about 34% of the total regional road network).

More specifically, this component would aim at:

(i) rehabilitating about 2,200 km of regional roads which are critical to regional development; and

(ii) performing the periodic maintenance of about 2,700 km of regional roads rehabilitated by Provias Rural 2 years ago and transferred to regional governments in 2004, as well as the periodic maintenance of road segments that have been rehabilitated early on within the project;

(iii) the related supervision activities.

[35] The various types of intervention in the road sector are usually classified in (1) new construction; (2) rehabilitation (every 10 to 15 years); (3) periodic maintenance (every 4 to 7 years); and (4) routine maintenance (continuous).

Although only slightly more than a third of the secondary network would be upgraded as a result of this component, the ultimate developmental impact is expected to be high since the roads segments to be upgraded have been selected according to their relevance for regional development:

- a sample of 8 road segments (totaling 532 km of regional roads) has been selected to be rehabilitated in 8 "fast track" regions at the very beginning of the project. A methodology mixing social and economic criteria has been applied to select the most relevant segments and the regional governments concerned have approved this choice.

Table: List of the Eight Road Segments to be Rrehabilitated at the Beginning of the Project.

Departamento	Segment	Length (km)	Vehicles per day
Junín	Palian – Vilcacoto – Acopalca – Abra Huaytapallana	95	73
Pasco	Yanahuanca - Tambopampa	33	208
Ica	Chincha – Puente San Juan	67	98
Cajamarca	Chilete - Contumazá	96	74
Piura	Paimas - Ayabaca	87	130
Cuzco	Huambutio - Huancarani	77	119
San Martín	Sacanche - Saposoa	22	71
Ayacucho	Cangallo - Huancapi	24	103
TOTAL		**532**	-

Source: Provias Departamental.

- The remaining 1,700 km of roads will be prioritized on the basis of the participatory regional road plans. An "ex-ante" allocation of funds to the various regions has been prepared by Provias Departamental, taking into consideration the conditions of the network, the good condition secondary road density per capita and the financial capacity of regional governments. About 300 km of roads have not been pre-assigned but will rather been put in a "competitive fund" (*fondo concursable*) together with the allocation of regions which would decide not to participate in the project or which are not able to comply with the requirements to enter the project (see Annex 6 on implementation arrangements). The resources from the *fondo concursable* would be allocated in priority to regions which have been successful in implementing their initial allocation of resources and the corresponding institutional reforms. This methodologies has been designed with the objective of (1) improving access to good conditions' transport infrastructure as measured by the road density in each region; (2) improving the management of the secondary network at the level of each region (ie. increasing the proportion of regional roads in good conditions as a share of the total secondary network in each region); and (3) ensuring that regional governments have the financial capacity to bring counterpart funds. In addition, the "competitive fund" provides an additional incentive for regions to implement the institutional reforms and the investment program according to the project's principles.

Table: Pre-Assignation of Project Funds to the Various Regions.

Departamento	Pre-assignation (km)	Secondary network in good conditions (km)		Good conditions' secondary road density (km/million people)		Pre-assignation as % of regions' maximum financial capacity
		initial	end of project	initial	end of project	
Amazonas	137	6	143	14	328	64
Ancash	141	188	329	167	293	100
Apurimac	50	235	285	499	605	45
Arequipa	140	205	345	184	310	41
Ayacucho	50	669	719	1,193	1,282	41
Cajamarca	150	102	252	67	166	100
Cusco	100	541	641	442	524	43
Huancavelica	75	194	269	429	595	19
Huanuco	50	304	354	488	568	24
Ica	50	82	132	117	189	**179 ***
Junín	110	209	319	166	253	37
La Libertad	109	25	134	16	88	100
Lambayeque	0	38	38	NA	NA	0
Lima	60	113	173	490	750	0
Loreto	0	44	44	NA	NA	0
Madre de Dios	46	0	46	0	451	90
Moquegua	63	0	63	0	394	65
Pasco	72	154	226	568	834	30
Piura	124	164	288	99	173	75
Puno	150	161	311	126	243	59
San Martín	49	124	173	161	225	16
Tacna	109	23	132	76	437	44
Tumbes	50	36	86	174	415	**125 ***
Ucayali	0	0	0	0	NA	0
Total	**1,885**	**3,617**	**5,502**	-	-	-
fondo concursable	**315**	(km of roads which are not pre-assigned between regions)				
TOTAL	**2,200**	(sum of pre-assigned + *fondo concursable*)				

* Ica and Tumbes are the only two regions where the initial assignation of resources may exceed the financial capacity of regional governments. These regions would receive resources to rehabilitate 50 km of secondary roads which is considered to be the minimum worthwhile allocation per regions. Further financial capacity analysis will be conducted – if needed – for these two regions during project implementation.

- The 2,706 km of regional roads transferred by Provias Rural had been prioritized according to connectivity criteria with the tertiary network (ie. ensuring continuity between the rural roads rehabilitated and the rest of the road network). As such, these segments are critical to rural mobility and, therefore, they play an important role to promote access of rural populations to social services (schools, health centers) and economic opportunities (markets). In addition, performing the periodic maintenance of these road segments is a cost-effective asset management option since these roads have been rehabilitated a few years ago and the benefit of this significant investment could be lost if maintenance is not performed in a timely manner.

In order to ensure a cost-effective use of scarce budget resources, the totality of these road segments will not be paved, but rather just affirmed with gravel. If well-maintained (what this project aims at, see component 3 below), a good gravel road can provide transport conditions which are comparable to a paved road in average conditions, at a cost several times lower. In addition, paving roads is not a cost-effective solution for low-volume roads. The experience of the Second Rural Road Project has shown that the gravel road technology works very well when adequate levels of routine maintenance are performed.

Regional governments would contract private enterprises to perform the rehabilitation works and engineering consultants to carry out the relevant supervision, with the technical support and oversight of the PVD. None of the works to be undertaken under this component will require resettlement or imply major impacts to the natural environment.

Eligible expenditures for this component will include rehabilitation, periodic maintenance and supervision costs for regional roads segments prioritized as described above.

Component 3 – Routine maintenance of regional roads (US$26.12 million of which US$3.39 million financed by the Bank loan)

A major condition for an efficient management of transport infrastructure is that regular maintenance is performed. Routine maintenance extends considerably the life time of roads and has been proved to have the best return-on-investment among other investment alternatives in the transport sector. [36] In addition, maintenance activities generally are very labor-intensive and they require unskilled labor. As such, they can contribute to generate employment opportunities among poor communities, and therefore, enhance the overall *effectiveness* of a road management project in promoting growth and reducing poverty. This "outsourced" model to road maintenance has finally proved to be much more efficient than the traditional "in-house" model (generally called "force account" model) in which road maintenance is performed by public agencies.

In Peru, the Second Rural Roads Project has proven that road maintenance has an excellent payoff: after rehabilitation, gravel roads are routinely maintained by micro-enterprises constituted with "associates" (*socios*) from poor rural communities. Gravel roads are much cheaper and easier to rehabilitate and maintain than paved roads alternatives for low volumes of traffic but, still, they provide major improvements in transport conditions and costs. In the vast majority of cases, gravel roads represent the optimal technical and economic alternative for road rehabilitation. Micro-enterprises create employment opportunities for the rural poor and they help develop an entrepreneurial capacity in rural areas. Provias Rural, the agency in charge of managing the Second Rural Road Project has already tested the "micro-enterprises" model on the 2,706 km of regional roads which have recently been transferred to the regional governments (see Component 2 above).

Building from these successful lessons of several international and Peruvian experiences, this component aims at improving the efficiency and effectiveness of road maintenance through

[36] The construction of new roads typically have internal rates of return (IRR) of 10 to 20%, the rehabilitation of existing roads have an IRR of 20 to 35% while the IRR of maintenance activities generally range between 30 and 70% (*sources:* IRF and GTZ).

scaling-up the micro-enterprise maintenance mechanism in the regional road network. After rehabilitation under component 2 (see above), 2,200 km of regional roads would be routinely maintained, as well as the 2,706 km of roads transferred by Provias Rural, before and after having undergone periodic maintenance under component 2. In total, this component would therefore finance the maintenance of 4,906 km of regional roads, ie. about 34% of the total regional network.

In addition, specific mechanized maintenance activities which are performed once a year after the rainy season (called *perfilados* in Spanish) on the secondary network will be eligible under this component up to a maximum of US$8.8 million. It is expected that these activities will be performed under force account but regional governments will be encouraged to also contract them out. The unit cost of such mechanized maintenance activities has been estimated to about US$600 per km and per year.

Particular attention will be paid to ensuring the sustainability of the model (i.e., that sufficient funding is dedicated by regional governments to maintenance and that micro-enterprises are contracted to perform such maintenance). Some adaptations to the "Rural Roads approach" will be considered, in particular, the possibility of contracting small size construction firms in addition to the traditional "community-based' micro-enterprises to perform certain types of road maintenance activities. The possibility of progressively introducing competition in the way micro-enterprises are contracted could also be explored, based on the successful experience of Provias Rural. These activities will also follow environmentally sensitive approaches, following current practices in Peru and other Latin American countries.

The contribution of external borrowing to routine maintenance expenditures is small because regional governments already have allocated in their budget the funding to cover 100% of routine maintenance costs for the 2,706 km of regional roads transferred by Provias Rural. Additional resources would therefore just be needed for the 2,200 km of rehabilitated roads (which will be progressively rehabilitated over the duration of the project, and therefore maintenance will be only performed once rehabilitation has taken place and until the end of the project. Regional governments will be expected to contribute 50% of the routine maintenance costs on rehabilitated roads (the other 50% being financed from external borrowing).

Eligible expenditures for this component will include routine maintenance and supervision costs performed by micro-enterprises or small size construction firms on secondary road segment prioritized as described above. Supervision expenditures will be eligible under this component provided they are contracted out.

Component 4 – Institutional capacity building (US$17.14 million of which US$5.95 million financed by the Bank loan)

A key objective for the project is to contribute to the overall decentralization process in Peru through the implementation of a successful decentralized approach to secondary road management at the regional level. A major challenge is therefore to put in place a robust and agile institutional framework allowing regional governments to plan, manage and implement transport interventions in an efficient and sustainable manner. This component aims at providing

a comprehensive capacity building package which will allow to build this regional institutional framework.
The component will include two sub-components: sub-component 4-A (institutional strengthening activities benefiting to regional governments) and sub-component 4-B (institutional strengthening activities benefiting PVD).

Sub-component 4-A will finance the following institutional support:

(i) The rationalization of the current institutional framework for road management at the regional level. In particular, there currently exist major duplication due to the coexistence of the (small) decentralized RIMUs, newly-created as part of the organizational structure of the regional governments, and the (large) deconcentrated RRDs (formerly with the Ministry of Transportation and Communication). The ultimate objective of the institutional rationalization that would be performed under this component is the creation of a unique body (arising from the restructuring of the RDDs and the RIMUs), placed under the full authority of the regional government. However, each regional government is in a different stage of evolution towards this ultimate institutional goal: in some regions, the RDDs are already almost entirely integrated in the regional government's organizational structure. In others, strong resistance from the RDDs has increased duplication and inefficiencies. To account for these differences, this component will propose a customized approach to the restructuring of each regional government. In particular, in each region, a detailed institutional diagnostic and action plan will be prepared with the help of an external consultant in order to propose a new administrative structure and to identify the transition requirements. In a second phase, the component could finance the implementation of this action plan (eg. training, workshops, or further analytical work such as the definition of the human resource policy or any future evaluation of the efficiency of the implements of the institutional reform). No financing, however, would be provided to cover the costs of any possible redundancy scheme ;

(ii) managing a transition from direct administration of road maintenance/rehabilitation to contracting it to the private sector. Road maintenance activities are still performed by the RDDs – and in certain cases by the RIMUs – under a "force account" model. This component will promote the transition to an outsourced approach, with the contracting of private firms and micro-enterprises to perform rehabilitation and maintenance activities. Eligible activities would therefore include: (1) preparation of contracts; (2) training in contracting and supervision; (3) definition of a strategy to phase out the "force-account" approach and of an action plan to implement the strategy and manage the transition (eg. how to get rid of the stock of heavy equipments); and (4) promotion of the constitution of micro-enterprises;

(iii) training in safeguards management. This component will also help building a capacity at the regional level in dealing with safeguards issues (procurement, financial

management, environmental management, social management). Eligible expenditures will include training costs and related dissemination and coordination costs;

(iv) monitoring, auditing and evaluation. This component will also help build at the regional level a capacity to monitor and evaluate project implementation (inputs, outputs, outcomes and impacts). Eligible expenses include the definition of a monitoring framework and methodology, training, external auditing and impact evaluation costs;

(v) analysis of the supply of transport services on regional roads and clarification and assignment of responsibilities over the regulation of transport services and road safety. This component will help clarify how some regulatory issues related to transport management at the regional level is performed and in particular, what should be the respective responsibilities of the regional and the central levels and what are the institutional consequences. A similar assessment will be performed for road safety issues;

(vi) financing policy for the sustainable maintenance of road assets. This component will help evaluate the financial situation of the regions and define a strategy to secure and – if needed – increase the financing of road-related expenditures by regional governments. The cases of Tumbes and Ica could be particularly considered to receive such technical assistance.

Sub-component 4-B will finance the following institutional support:

(i) timetable of actions for the restructuring of the PVD. The decentralization process has major consequences for the central agency, Provias Departamental (PVD). Significant decisions have already been taken and are described in a restructuring plan agreed upon at negotiations. The challenge will be, as decentralization progresses, to move towards a small, agile and well-trained, regulating agency which defines the national policy with regards to the management of secondary roads (eg. technical standards), monitors the work of the regional governments in managing regional roads, provides them with technical assistance when necessary and does not accomplish any implementation tasks (since these are the responsibilities of the regional governments and the private sector). This component will finance the definition of a strategy which takes this principles into account in order to define a vision for PVD at the end of the project, as well as an action plan to implement the strategy and manage the transition (with explicit implications in terms of staffing and budget). Related implementation costs (such as training and further analytical works regarding human resource management) would also be taken into account within this component. However, severance payments to former staff would not be eligible;

(ii) training in safeguards management. This component will also help building a capacity at the central level in dealing with safeguards issues (procurement, financial

management, environmental management, social management). Eligible expenditures will include training costs and related dissemination and coordination costs;

(iii) monitoring, auditing and evaluation. This component will also help build at the central level a capacity to monitor and evaluate project implementation (inputs, outputs, outcomes and impacts). Eligible expenses include the definition of a monitoring framework and methodology, training, external auditing and impact evaluation costs;

(iv) if necessary, some resources (up to a total of US$200,000) could be used to finance strategic studies related to the management of the regional road network in the context of national transport policies and programs, complementing other existing resources that focus on overall transport policy formulation. [37]

In sum, eligible expenditures for this component will include for example (1) the technical assistance provided by consultants; (2) studies and evaluations performed by consultants; (3) training costs; (4) dissemination costs; (5) administrative costs; and (6) the organization by Provias Departamental of coordination events (to facilitate exchange of experience between the various regions and to monitor results). The acquisition of some goods and equipment that are critical to the institutional strengthening of the regional or the central level would also be eligible. In order to facilitate the use of resources for technical assistance between the two levels (central and regional), an "unallocated" category of expenditures of US$2 million has been introduced in the loan agreement. At the time of negotiations, it was estimated that the US$5.95 million from the Bank loan available for technical assistance would be used in the following way: US$0.6 million for PVD; US$3.4 million for regional governments; and US$2 million unallocated.

Component 5 – Project administration (US$6 million to be entirely financed from national counterpart funds)

This component will include the administrative costs incurred by the project implementation unit within Provias Departamental. However, it would not include the administrative costs incurred by the regions. These costs have been estimated to US$6 million.

[37] For example, IDB resources within its Third National Road Project.

Table: Summary of the Project's Components.

Component	Eligible regions	Contribution to development objective		
		prioritization	efficiency	effectiveness
Participatory planning	Every region with a substantial secondary road network, on a voluntary basis	Identification of road segments which are the most relevant to regional development		Identification of the most relevant road segments will increase impact on economic growth and poverty
Road upgrading	Every region committing to the project's principles and having implemented certain prior requirements [38]		Contracting private operators will increase efficiency	Improvement of road conditions and employment generation will contribute to regional growth and poverty reduction
Road maintenance			Outsourcing to micro-enterprises will increase efficiency	
Institutional strengthening	Every region with a substantial secondary road network, on a voluntary basis	Institutional strengthening will improve planning capacity and ability to fully integrate transport interventions in the broader regional development agenda	Institutional restructuring and suppression of duplication will increase efficiency	Strengthening of the decentralization process will improve the capacity of regional governments to design and implement regional development and poverty reduction strategies
Project administration	Only central expenditures	Enhance Provias Departamental's capacity to help strengthening the institutional capacity of regional governments and to monitor them		

Project's estimated costs are summed up in the table below:

component	expenditures	World Bank	IDB	PVD	Regional Governments	Total
Participatory planning	**TOTAL**	**5.45**	**5.45**			**10.90**
	Preparation and updating of plans	0.25	0.25			0.50
	Feasibility studies (*estudios pre-inversión*)	1.20	1.20			2.40
	Technical studies (*estudios definitivos*)	4.00	4.00			8.00
Road upgrading	**TOTAL**	**34.71**	**34.71**		**69.42**	**138.84**
	Rehabilitation	27.50	27.50		55.00	110.00
	Periodic maintenance (rehabilitated roads)*	0.23	0.23		0.45	0.91
	Periodic maintenance (transferred roads)**	4.50	4.50		9.00	18.00
	Supervision rehabilitation activities	2.20	2.20		4.40	8.80
	Supervision periodic maintenance activities	0.28	0.28		0.57	1.13
Road maintenance	**TOTAL**	**3.39**	**3.39**	**1.73**	**17.61**	**26.12**
	Rehabilitated roads (including *perfilado*)	1.00	1.00		2.00	4.00
	Transferred roads (without *perfilado*)				10.82	10.82
	Perfilado transferred roads	2.20	2.20		4.40	8.80
	Supervision	0.19	0.19	1.73	0.38	2.50
Institutional strengthening	**TOTAL**	**3.95**	**3.95**	**3.11**		**11.01**
	Training	2.85	2.85	1.88		7.58
	Technical assistance	0.50	0.50	0.08		1.08
	Goods	0.10	0.10	0.80		1.00
	Monitoring and evaluation	0.50	0.50	0.35		1.35
Project administration	**TOTAL**			**6.00**		**6.00**
Unallocated		**2.00**	**2.00**	**2.13**		**6.13**
Front-end fee		0.50	0.50			**1.00**
TOTAL		**50.00**	**50.00**	**12.97**	**87.03**	**200.00**

* These expenditures relate to the periodic maintenance of the roads which have been rehabilitated early on during project implementation and which will need periodic maintenance by the end of the program.

** These expenditures relate to the periodic maintenance of the roads which have been rehabilitated by PVR before being transferred to regional governments along with the corresponding budget resources.

[38] Have a participatory regional road plan finalized and approved, bring 50% of the rehabilitation or maintenance costs, agree to a decentralized and outsourced implementation, implement some institutional changes to avoid duplication in road management, commit to participate in institutional strengthening activities and agree to be transparent and accountable.

Annex 5: Project Costs

PERU: Regional Transport Decentralization

Project Cost By Component and/or Activity	Local US $million	Foreign US $million	Total US $million
Preparation of Regional Road Plans	0.50	0.00	0.50
Pre-feasibility and feasibility studies	2.30	0.00	2.30
Design studies	5.00	2.00	7.00
Road rehabilitation (2,200 km)	75.00	35.00	110.00
Road periodic maintenance (2,706 km + some of the rehabilitated roads)	14.35	14.35	28.70
Supervision	8.50	2.50	11.00
Road routine maintenance (2,706 km)	9.80	1.00	10.80
Perfilados	4.80	0.00	4.80
Road routine maintenance for the rehabilitated roads	3.00	0.40	3.40
Institutional capacity building	8.75	8.75	17.50
Monitoring and evaluation	0.25	0.25	0.50
Administrative costs	1.75	1.75	3.50
Total Baseline Cost	133.00	64.50	197.50
Contingencies	1.00	1.00	2.00
Total Project Costs[1]	134.00	65.50	199.50
Interest during construction	0.00	0.00	0.00
Front-end Fee	0.00	0.50	0.50
Total Financing Required	134.00	66.00	200.00

[1]Identifiable taxes and duties are US$m 34.8, and the total project cost, net of taxes, is US$m 165.2. Therefore, the share of project cost net of taxes is 82.6 %.

Annex 6: Implementation Arrangements

PERU: Regional Transport Decentralization

The project will be implemented in a decentralized manner at the regional level, with involvement of the central level to monitor implementation progress, facilitate coordination across regions and provide the necessary technical assistance in order to build sufficient institutional capacity in the regional governments. Over the project's lifetime, regional governments should grow in institutional capacity and effective ability to manage regional road assets in an efficient manner, while the central agency Provias Departamental (PVD) should be downsized and refocus its core activities on monitoring, coordination, supervision and policy design. Implementation arrangements illustrate the overall ultimate objective of the project to make a substantial contribution to the decentralization process through successfully experimenting it in the road sector. In particular, regional governments will be empowered since the very beginning through the realization of the participatory regional road plans but also, in the following phases, through handling the contracting and supervision of the road rehabilitation and maintenance activities. A comprehensive institutional strengthening program has been design in order to help them develop the corresponding capacity.

In brief, the specific overall responsibilities of each institution/entity are as follows:

Institution/Entity	Overall responsibility
Multisector Advisory Committee	High Level Steering Committee
Provias departamental	Monitoring, evaluation, coordination, management of technical assistance Ultimate responsibility for compliance with project requirements (safeguards, fiduciary), procurement guidelines, and implementation actions and schedule
Regional governments: • Planning units • Implementation units within regional governments (most likely RIMUs)	• Preparation of participatory regional road plans • Leading agents in implementing components 2 and 3 (in particular, contracting and supervision of road upgrading and maintenance activities)

At the national level, the overall responsibility for project implementation and coordination will rest within Provias Departamental. PVD will also bear the ultimate responsibility for compliance with project requirements (safeguards, fiduciary), procurement guidelines, and implementation actions and schedule. An interim unit has been constituted within PVD to manage the preparation of the project. As of December 2004, this unit included a staff of nine: a director, a consultant recruited to manage the coordination of the preparation work, five professionals (skills) and two support staff. These professionals will be supported by more junior staff as the project develops and the number of participating regions increases. An agreement was reached at that moment with the General Manager of PVD to reinforce this unit in order to pursue preparation activities in the most efficient way and to prepare the ground for the future implementation unit. More specifically, it was estimated that at least eight additional full-time professional staff should be recruited or reallocated, including: two people in charge of designing the project's strategy and setting up the implementation arrangements for routine road maintenance, two persons to handle procurements, one specialist of participatory planning, one environmental expert, one social specialist and one financial management expert (who could also follow the monitoring of counterpart funding from the regional governments). Additional people

will need to be reallocated or recruited as the project's implementation builds up. For project implementation, this unit will be reorganized so that a growing amount of PVD's human resources are progressively dedicated to providing support to the regional governments and to monitoring their activities. It will be essential that an adequate number of professionals are identified in each of the following areas of expertise: project coordination, legal, planning and budget, social and environmental, institutional development, road engineering, procurement and financial management. The strategic refocusing and progressive restructuring of PVD (in particular with the closing of the *unidades zonales*) should help ensure this transition. Ultimately, PVD should have one sole mission which is contributing to the strengthening of the institutional capacity of the regions wit regards to road assets' management.

Based on the positive experience of the Multisector Commission created to help prepare the project, an agreement has been reached with the Peruvian authorities in order to create a Multisector Advisory Committee to supervise the preparation of the project and ensure coordination between the relevant ministries and agencies. The Multisector Commission was created in 2003 for a period until the approval of the project by the Bank's Board of Directors. The Commission was chaired by a representative of the President of the Council of Ministers (PCM) and it included representatives from MTC, MEF and CND (which also represent the perspective of the regional governments). The Commission has proved to be an efficient mechanism of coordination and it has provided very valuable inputs in project design. The Multisector Advisory Committee will include the same members as the Multisector Commission, plus two members representing regional governments (who could be the two presidents of regional governments who are members of the CND).

Strong coordination will also be ensured between PVD and the other relevant departments of the MTC. In particular, PVD will closely interact with Provias Rural in order to benefit from its extensive experience in decentralization of rural roads at the municipal level. PVD will also coordinate with Provias Nacional to ensure that the strategies developed for the primary and the secondary road network is consistent. Finally, will also closely interact with other MTC departments on specific issues such as road classification (office of planning and budgeting), heavy equipments' stock (General Directorate of Roads and Railways)[39] and social and environmental policies (DGASA).

Within each region, the overall responsibility for project implementation will rest with the regional government. For component 1, the preparation of the participatory regional road plans will be handled by the planning unit of the regional government in close coordination with the RIMUs and with technical assistance provided by PVD. For components 2 and 3 (road upgrading and maintenance), a specific unit will be designated within the regional government's organization structure to handle project implementation. The choice of the unit remains the responsibility of the regional government in order to ensure ownership and account for the possible variations in organizational structure across regions. Nevertheless, it is very likely that this unit will be the existing RIMUs (or a unit within the RIMUs), since they are the truly decentralized entity in charge. The designation of this unit, as well as the institutional restructuring to clarify the respective role of the RIMUs and the RRDs, is one of the conditions for regions to be eligible to components 2 and 3. While the RIMUs generally are much smaller

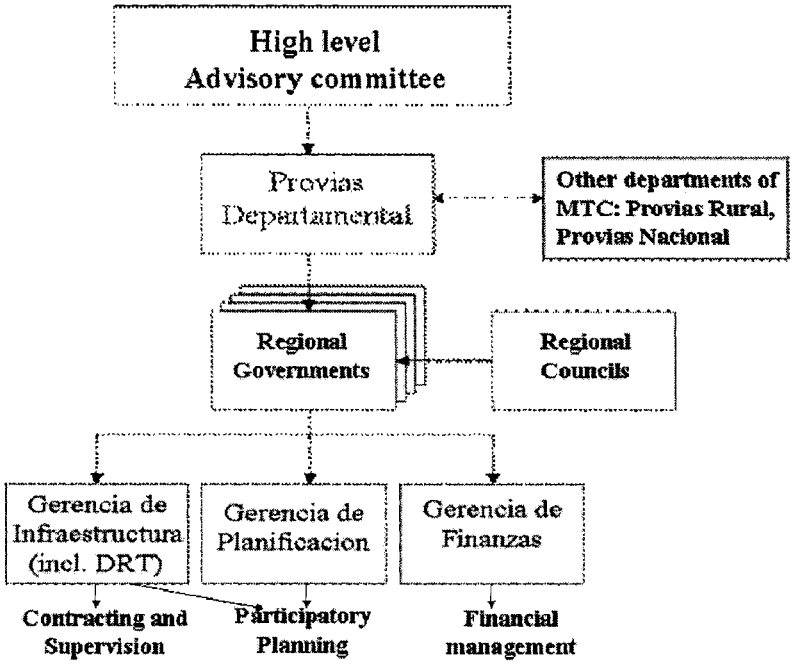
[39] *Dirección General de Caminos y Ferrocariles* (DGCF).

than the RRDs, it has been estimated that when aggregating the staff of the two entities, the number of people involved in regional road management at the regional level amount to about 2,000 (eg. 484 people in Cusco, 367 in Junín, 225 in Arequipa and 195 in Huancalica). A significant challenge for the constitution of the competent unit within each regional government, will be to staff these unit with competent people (through reallocation or external recruiting) while preventing the incorporation of staff related to the old "force account" model. Specific technical assistance regarding human resource management in the regional governments has been tailored as part of component 4.

As explained before, the relationships between the regions and Provias Rural will be formalized through agreements to be ratified by the two parties. These agreements will address (1) the subscription by the regions to the project's principles; (2) the co-financing scheme for rehabilitation or maintenance activities; and (3) the implementation arrangements for important institutional reforms (including the related technical assistance to be supported under the project).

Most of the project's resources for road rehabilitation are pre-assigned between the regions based on the conditions of the secondary network, the density per capita of secondary roads in good condition and the financial capacity of governments to bring counterpart funds. The remaining resources are put in a competitive fund *fondo concursable*) together with the assignations of the regions that do not qualify to enter in the project. The methodology for resources' assignation across regions is described in annex 4.

Schematic Representation of the Institutional Framework.



Eligibility of the regions to participate in the project

All the regions with a regional road network in need of rehabilitation and which have signed with PVD a framework agreement (*convenio marco*) describing the overall project's principles will be eligible to component 1-A. For expenditures related to the upgrading or maintenance of a particular road segment (ie. technical or feasibility studies under component 1-B, rehabilitation or periodic maintenance activities under component 2 or routine maintenance under component 3), a framework agreement, a financing agreement (*convenio de financiamento*) must have been signed between PVD and the regional government. In addition, an annual operation plan (*plan operativo annual*) and a participatory regional road plan including the corresponding road segment must have been approved by the regional government. For expenditures related to the institutional strengthening component (sub-component 4-A), a framework agreement and an institutional framework (*convenio institucional*) must have been signed between PVD and the regional government.

Monitoring and evaluation

The monitoring of project implementation encompasses two levels. One level consists of the review of project performance and annual plans that will be undertaken by PVD on a continuous basis; the other consists of periodic performance audits, participatory evaluation exercises (involving in particular regional governments) and impact assessment studies that would be carried out by independent firms and specialized NGOs. The application of the project information and monitoring system would allow PVD, IDB and the Bank to ascertain the progress of the implementation of each sub-project and the degree of achievement of the project development objectives. Every twelve months or as necessary, auditors acceptable to IDB and the Bank - and financed under component 4 - will conduct a performance audit of the implementation of the project by examining a sample of sub-projects under execution. The exact scope of these audits will be determined each year during a supervision mission. The audits could particularly focus on the execution of the project physical components (quality and cost of works), procurement procedures, and compliance with the guidelines of the Project Operational Manual and the performance indicators agreed between PVD and each regional government. Through the audit, cost comparisons could be made available and reviewed to identify procurement problems or other factors contributing to variations among the different regions; the scope of the sample of work sites included in the audit will be adjusted to these findings.

The project will also undertake an assessment of intermediate socio-economic impact indicators related to the contribution of regional roads to productive activities and the socio-economic well-being of participating families. These evaluations may also use control cases, by comparing similar territories that were not subject to project interventions. The information annually generated under the household survey, ENAHO, will be used, for cross-checking the results of the evaluation. The costs of these evaluations have been included in component 4. PVD will contract an external consulting firm to carry out these analyses. Results will be disseminated, in particular to the regional governments.

A participatory monitoring process will be also be incorporated into the overall M&E system to include a beneficiary assessment of the decentralization process and adherence to project

rules, progress and results of implementation. This will, in particular, be implemented through the organization of participatory events involving high level representatives from regional governments (presidents of regional councils or *gerentes generales*). Similar consultations of regional governments were organized during project preparation and they provided valuable inputs to project design.

Annex 7: Financial Management and Disbursement Arrangements

PERU: Regional Transport Decentralization

The Financial Management Assessment has been undertaken in accordance with OP/BP 10.02 and the Guidelines for Assessment of Financial Management Arrangements in World Bank Financed Projects. The evaluation has been performed on site during the pre-evaluation mission in February 10, 2005 and subsequently updated, during the week of appraisal April 25-29, 2005. Being a co-financed operation, the evaluation has being conducted jointly with the Financial Specialists of the Inter-American Development Bank (IADB), in order to synchronize the needs of both donors as well as the country authorities. Leveraging on previous work done by LCOAA in promoting the use of country systems in Peru, and in order to deepen harmonization efforts with the IADB, during appraisal, the dialogue continued with members of the Ministry of Economy and Finance (MEF) responsible for the expansion of the "Sistema Integrado de Administración Financiera" (SIAF).

Executive Summary

The current project, co-financed by the IADB, has been aligned with the Peru's Country Assistance Strategy (CAS), building on past and ongoing Bank interventions. It aims at ensuring a sustainable and successful transfer of expertise for the newly-created regional governments (RG) to efficiently manage the regional road network. The central agency Provias Departamental (PVD) within the Ministry of Transport and Communications (MTC) would be the project implementation unit (PIU), moving from executive agency towards a regulatory body, supervising and facilitating the implementation of the decentralization process. In this context, PVD will not execute any road construction and maintenance work, after the year 2007. Under the current project, PVD will build technical and financial management capacity and will eventually transfer road works to RGs.

Sound financial management is critical to effectiveness development and project success. Relevant and reliable financial information provides the basis for better decision-making, improved management of physical and financial resources, and reduced delays during implementation.

The objective of the present financial management assessment is to evaluate the processes that bring together planning, budgeting, accounting, financial reporting, internal control, auditing, procurement, disbursement, and physical performance for the project, as well as to determine the necessary steps to achieve adequate resources management and reach the project development objectives.

The Project Implementation Unit has not yet been established. According to local regulations this is expected to be done after signature of the loan agreement related to this current project. However, as part of the Project Preparation Grant, the options for financial management arrangements have being proposed, using a model that builds on the lessons learned and arrangements currently implemented in the Second Rural Roads Project (an operation currently implemented in the infrastructure sector, which is also co-financed by IBRD and IABD). Based

on the review carried out for the proposed arrangements, the financial management team concludes that adequate mechanisms to support effective implementation and accountability in the use of resources (accurate and timely information regarding project resources, expenditures, and activities) will be in place, upon completion of the time bound action plan. This FM Action Plan is described below. Since the project will use national norms in key areas such as internal control, budgeting, treasury and accounting, much of the focus of the assessment was placed on analyzing and recommending alternatives to ensure timely and efficient flow of funds and operational procedures necessary to facilitate an efficient preparation of withdrawal applications. Leveraging on previous collaboration work done with the IADB, we also were able to reach a consensus in order to design a uniform reporting, auditing, monitoring and evaluation arrangements.

So far, and in accordance with the proposed action plan, some progress has been made: (i) acceptance from the World Bank, IADB and PVD of a decentralized flow of funds model, using national information systems (explained below); (ii) formal nomination, through an internal Memorandum, of the financial director; (iii) draft inter-institutional agreement governing the relationships between PVD and the GRs; (iv) submission of a draft Operations Manual to the Bank, (v) harmonization with IADB of TORs for the external audit, and (vi) harmonization of FRMs (the formats have been agreed with the National System for Public Investment – SNIP - and are in progress with IADB).

Overall, entity and project specific features have been assessed and risks are considered as ***HIGH.*** At present, the major capacity constraints relate to:- 1) the lack of experience of the PIU with other WB projects; 2) the inability to produce Financial Monitoring Reports (FMRs) to support project management; 3) the lack of technical experience and financial management capacity of the regional governments involved in managing challenging projects, 4) the lack of experience of the PIU in satisfying donors' requirements especially in the areas of reporting; 5) the new decentralized environment of the current project, with centralized coordination and reporting from PVD, and 6) possible resistance of the PVD and RGs staff to accept the new way of doing public works.

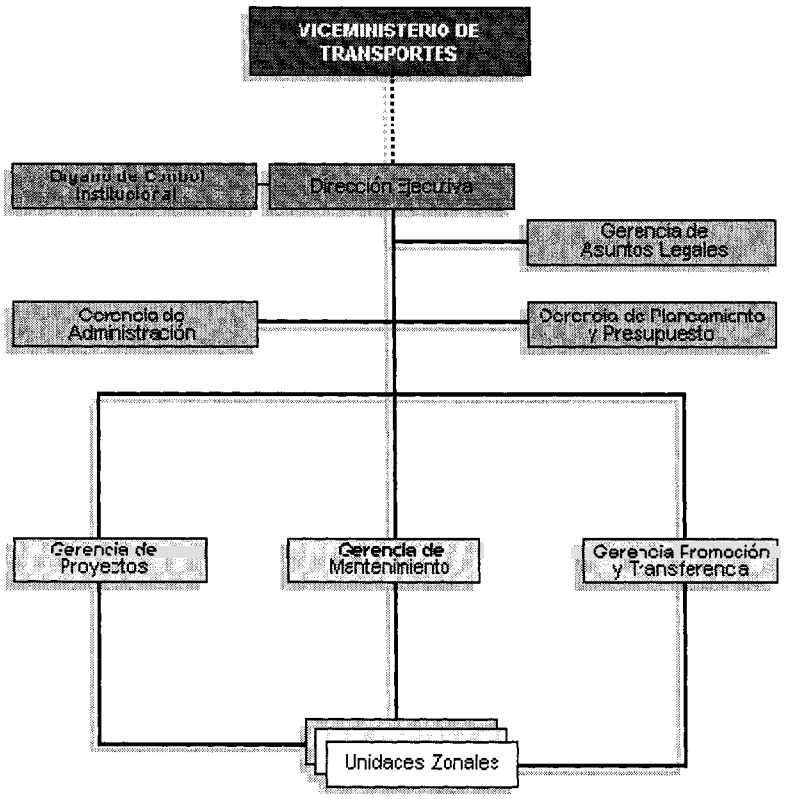
In order to build sustainable financial and operating capacity in the PIU, reduce the inherent and control risks (project complexity and scope), as well as transactions costs associated with project implementation, the Financial Management Team has proposed the following key actions:- 1) to use the existing country systems, especially the national information system (SIAF), to manage key functions of accounting, budgeting and disbursements and reporting; 2) to modify the existing project execution model in SIAF (MEP), by building on the lessons learned in the implementation of the Second Rural Roads Project, in order to handle the complexity of decentralized flow of funds; 3) to satisfy the harmonized reporting requirements of the IBRD and IADB using the national systems as source and report of information, , 4) to satisfy donors audit requirements using audit terms of reference (TORs) similar to the harmonized TORs of the IBRD/IADB co-financed project Lima Transport (PROTRANSPORTE) currently carried out in Peru, and 5) make cultural changes by providing training in horizontal communication and cross functional team-building and by increasing collaboration between PVD and RGs teams in the areas of financial management, planning and budgeting.

Organization and Staff

The organizational structure and staffing of two main actors need to be reviewed. Those actors are the regional governments and PVD.
A/ Twenty one (out of 24) Regional Governments will be involved in this project. Six of them, are expected to participate in the initial phase of the project. As mentioned above, they employ qualified staff with good working experience in budgeting and accounting. Significant improvements have been achieved in budget execution and accounting, using the SIAF. However, procurement and archiving processes are very weak, particularly because of high staff rotation rates that can compromise project implementation. Therefore, there is an urgent need for stability and capacity building in the above areas.

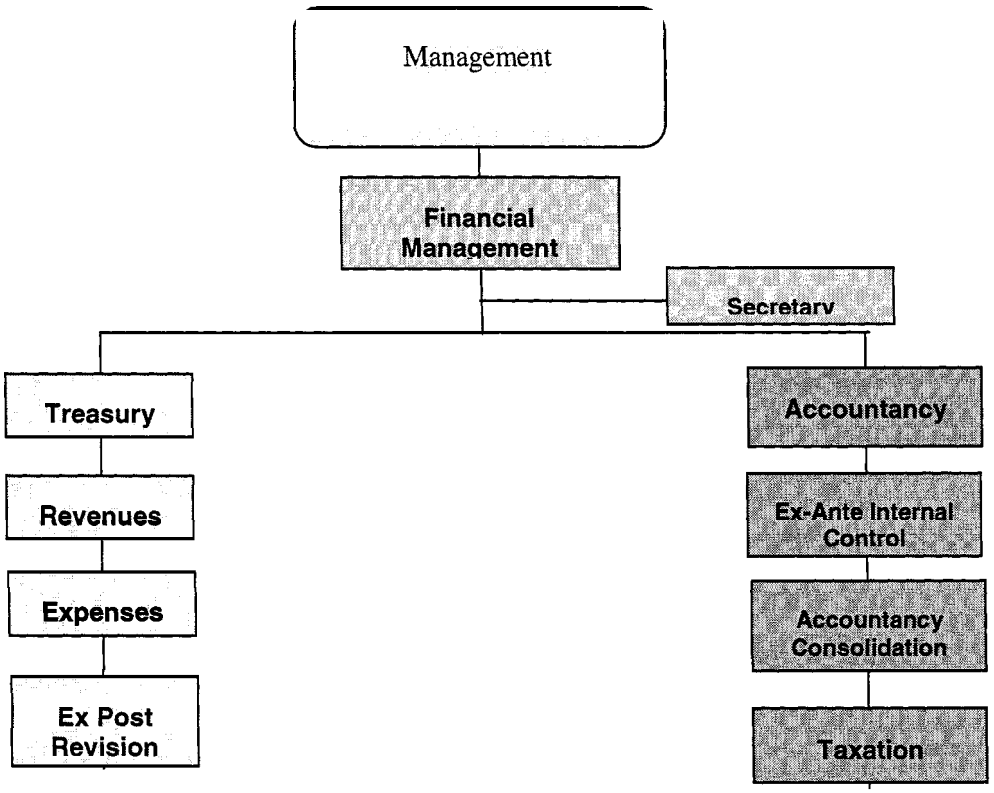
B/ PROVIAS Departamental, hereafter referred to as the Project Implementation Unit (PIU), is expected to provide technical and financial management assistance to the regional governments. Furthermore, the PIU would have primary responsibility for project coordination, monitoring and reporting.

The current organization and the staffing of the PVD respond to the arrangements to be implemented, even though, the current structure has been created to serve more centralized projects. Under the supervision of the VM of Transportation, PVD's key departments include:



Organigrama Aprobado mediante R.M.N°421-2002-MTC/15.02 del 23 de Julio del 2002

PVD's decentralized units ("Unidades Zonales") can perfectly be replaced by the regional governments, whereas the need for formalization of the relationships between regions and PVD and the relevant regulation to be enacted, before effectiveness. The regulation could be the same for all the regional governments, or, better but more difficult, adjusted to the characteristics and capacities of each regional government.
Under the department "Gerencia de Administración" (Management), the financial unit can perfectly handle the financial management of the project and bear the ultimate responsibility for compliance with project fiduciary requirements:



PROVIAS Departamental has an adequate and experienced financial and accounting team. The current staff is demonstrating experience in managing funds from international organizations. However, PVD will be coordinating this new decentralized project, using two sources of external funds (IBDB and IADB) and counterpart funds from all the participating regional governments. In this case the financial management team would have to deal with more complicated transactions, coordination and consolidation of accountancy, internal control, monitoring and reporting of all the participants. Therefore, in order to be able to move from managing projects in a centralized way to a decentralized one, the financial management teams of PVD and RGs would need some training in cultural and technical change.

Planning, budgeting and disbursements would be a very challenging exercise in this new decentralized environment. Delays in the elaboration, consolidation and communication of the decentralized budgets could cause delays in the flow of funds and project implementation. Therefore, some training in horizontal communication and cross functional team collaboration

will be needed between the financial management team and the planning and budgeting unit in PVD, as well as between PVD and the regional governments' correspondent teams.

Planning and Budgeting

Planning and Budgeting will be in line with general government procedures regulated by the Annual Budget Law operated under the *Sistema Integrado de Adminsitración Financiera* (SIAF), based on the annual operating plan (AOP) elaborated by the involved RGs. PVD would revise the AOP of each RG and consolidate all of them. The consolidated AOP for year n+1 would be transmitted to the Banks (IBRD and IADB) before November 30 of each year for clearance. More detailed information about the process would be developed in the Project's Operational Manual. According to the AOP the RGs and PVD would prepare their annual procurement plans. AOPs and annual procurement plans would then be used for the preparation of project's annual and semi-annual budgets, as well as of disbursements plans.

The budgetary control will consist of 1) timely preparation and approval of annual programs and budgets, at the *two* levels, i.e Central PIU (PVD), and Decentralized Agencies (RGs); and 2) verification that budget information is entered and it is available in the accounting system to allow timely recording of commitments, payments and accruals.

In the second phase (model 3 of funds flow), since the ability to make projections of cash flow requirements is a key element to successful implementation of report-based disbursements, the project will need to successfully remedy the lack of synchronization among project planning and execution of payments and authorization within the Ministry of Finance (MEF) of withdrawal application requests to the Bank, which may be a major contributor to bottle necks to disbursements. To mitigate this risk, the project will need to prepare and analyze on a quarterly basis budget execution variances.

Funds Flow Special Account and Reporting Requirements

This current project has the specificity to be coordinated and monitored by PVD, while the execution relies on the regional governments, in a decentralized manner. In that way, the sources of indebtedness will be managed by PVD, while the project implementation will be handled by the Regional Governments (GRs) "to name" of PVD. Besides that, the project will be financed by three types of sources of funds, provided by the World Bank, IADB and counterpart funds from regional governments (including transfers from the Peruvian Treasury), and from PVD (including transfers from the Peruvian Treasury). Nevertheless, some regional governments do not have the capacity, yet, to carry out the technical and financial management tasks needed for this project's implementation. Therefore, the channel of flow of funds should be designed/selected in a way to support the above project particularities and be considered as satisfactory by the two banks and the PIU.

Channel Selection: The general rule is that funds should be channeled to the level where the activities are actually carried out. Therefore, funds should be transferred to the bank account or cash box of the entity in charge of the implementation (Regional Governments), except in the

absence of adequate banking or other security arrangements, or capacity for implementation, when they may be managed by an intermediary agency (i.e. PVD).

Five models of flow of funds had been identified during project preparation. After analysis and negotiations, the FM teams of the two banks and PIU agreed that the best model to use is model 4, at least during the initial phase of the project, for the following reasons:

- Compliance with Peruvian Government's decentralization strategy;
- Better control over the use of external debt funds;
- Better control over the counterpart funds;
- Increased ex-ante control;
- SIAF-2 is ready for use in the areas of budget execution, disbursements, internal control and reporting (with some adjustments to fit this current project's specificities). The PIU and the involved regional governments are currently using the enhanced by the Bank SIAF (Integrated Financial System), a national system that can enable project implementation to operate within a decentralized environment.

According to model 4, the Regional Governments would function as decentralized Operative Units. The funds from IBRD and IADB (external dept) would be received by PVD in two separate special accounts, in US dollars, and transferred to the regional governments in local currency, while the Regional Governments would provide the corresponding counterpart funds. The RGs would proceed with budget execution, all the logistic process would be handled by the RGs, the original documentation would be sent to PVD for disbursements and archiving, while copies would be archived in the archives of the RGs. For activities handled by PVD, the funds would be transferred to a operational account in local currency handled by PVD; the correspondent counterpart funds would be provided by PVD.

During project implementation, disbursements will be transaction based (ie against Statements of expenditure (SOEs), full documentation, direct payments or special commitments). The Special Account will be maintained and operated by PVD in the *Banco de la Nación* in US dollars. Deposits into the Special Account and replenishments up to the authorized allocation set out in the legal agreement would be made on the basis of applications for withdrawals prepared by PVD and accompanied by the supporting documentation in accordance with Bank disbursement procedures.

The Special Account is only to be used for eligible expenditures under the loan (under no circumstances may funds in the Special Account be used to cover the share of expenditures corresponding to the counterpart). Sub-accounts for decentralized Regional Governments should be considered in the inter-institutional agreements. When payments are to be made, the Bank's portion of the expenses will be converted to local currency and transferred to a Local Currency account opened for each RG and PVD, which will be operated and maintained over the life of the project. These accounts will be used to issue checks or initiate transfers to providers of goods and services, in accordance with the agreed percentages of IBRD, IADB and counterpart funds.

Transaction-based disbursements: In this case, an Authorized Allocation (AA) for advances made into the Special Account will be established. This AA would be set to approximately

$2,000,000 or 6% of the total amount to be financed by the World Bank. The project could request such advance as needed once the loan is declared effective. The above amount approximately reflects 4 months of expected expenditures passing through the Special Account.

Once the initial deposit(s) has been provided, the PIU will submit subsequent withdrawal applications requests for replenishments to the Special Account on a monthly basis. All withdrawal applications will be fully supported by appropriate supporting documentation (i.e. invoices, receipts, and any other evidence of payment) except for those expenditures for contracts not subject to prior review and for which the Bank has approved the use of Statement of Expenditures (SOEs), as referred to in the Legal Agreement and the Disbursement Letter. The Central PIU (PVD) will be responsible for preparing and submitting withdrawal applications to the Bank. All supporting documentation of withdrawal applications (including those for which SOEs are used) should be retained by the PIU at its central location and be available for review by Bank supervision missions and independent auditors.

Withdrawal from the loan account could be made on the basis of SOEs for the following expenditures: (a) contracts for goods costing less than US$200,000 equivalent, (b) contracts for consulting firms, including training, costing less than US$200,000, (c) contracts for individual consultants, including training, costing less than US$50,000, and (d) works costing less than US$2,000,000.

Accounting Policies and Procedures

The project will be implemented in accordance with the 1) National Control System, which is regulated by the Supreme Audit Institution and 2) the National Accounting System, regulated by the Accountant General. The chart of accounts would be based on the *Plan Contable Gubernamental del Sistema Nacional de Contabilidad* and adequately adapted to reflect the new project design, i.e. components, disbursement categories and financing sources; accounts will be prepared on a cash basis.

Planning and Budgeting will be in line with the general government procedures regulated by the Annual Budget Law for 2006-*Ley the Presupuesto 2006* and the Budget Management Law-*Ley de Gestion Presupuestaria del Estado-27209* operated under the *Sistema Integrado de Administración Financiera* (SIAF). The operating and capital budget will be prepared and submitted to Congress on an annual basis on or before October 31, each year. The draft budget for the first year of the project will be presented to the Congress in November this year and will be based on planned expenditures by component, disbursement category and financing source.

The PIU will operate, maintain all the central level accounts for the project and have the RGs to maintain and operate all the regional sub-accounts. Payment request will be generated by the RGs or the PVD. Prior to the request for payment the internal control mechanism will evaluate the extent to which the work performed is in accordance with the legal and inter-institutional agreements and submit a request for payment along with the invoice and required supporting documentation. The RG or the PIU will then complete the cycle (invoice approval, payment authorization, check signing, check issuance and wire transfers, monthly bank and special account reconciliations.

The Financial Management Action Plan includes the finalization of the project's Operations Manual, which will be prepared by the PIU and reviewed internally, prior to submission to the Bank for review and non-objection. Due care will be exercised to ensure that the project accounting system will have the capacity to record assets, liabilities, and financial transactions of the project and produce financial statements, which are useful to project management, external audits, and satisfy the IBRD's fiduciary standards.

Internal Control

Since 2003, important changes have been implemented in the area of internal control in PVD. In year 2002, a qualified audit opinion was emitted, on internal control weaknesses. After staff and processes changes, an unqualified audit opinion was emitted on the financial statements for year 2003. The large account balances and the amounts pending justification by zonal services have been reduced. In 2004, the amounts were justified within 15 days and in 2005, this period is expected to decrease in 7 days. This would accelerate disbursements and projects' implementation.

Current project transactions undertaken by the PIU will be subject to the Internal Audit Department of the entity. This function is independent and reports to the country's supreme audit institution (Contraloría General de la República) the findings of its ex-post control.

The PIU is staffed with experienced and trained professionals including three public accountants. The FM unit has 19 members for the accounting, treasury and ex-ante control functions, and 10 accountants-reviewers for ex-post control and follow-up with issues related to current decentralized units and RGs involved in this current project. The scope and coverage of the overall Internal control plan will be expanded to cover project activities.

The internal audit department entity should prepare semi-annual reports evaluating the corrective actions taken in response to Internal Control findings. Archiving would need some improvements and better organization in the new special location lastly attributed to it, before project effectiveness. Special attention should be given to the internal control function in the RGs, during project preparation. Corrective actions should be taken according to the findings of the evaluation undertaken with funds from the Japanese Grant...At least one staff form each decentralized PVD entity, with FM background, should integrate the each RG FM team, in order to improve communication between them and heighten project disbursements, implementation, as well as project's financial statements, monitoring and reporting.

Information Management Systems

At present, PVD and Regional Governments are using the *Sistema Integral de Administración Financiera* (SIAF). Some RGs and PVD use the SIGA a parallel system compatible with SIAF that allows the registration of more detailed accounting information. Those systems can be used for project consolidation and monitoring and reporting, since their major capacities relate to:

- their ability to produce Financial Monitoring Reports (FMRs) to support project management;

- adequate monitoring mechanism for overseeing the financial operations of decentralized units;
- record keeping and filing with no fragments for audit trail of transactions and;
- synchronization between project planning, execution of payments and authorization, within the Ministry of Finance (MEF), of withdrawal application requests to the Bank.

Financial Reporting and Monitoring

Accounting System Modules

The accounting system utilized by PVD and the RGs is the SIAF. PVD and some RGs use the parallel system SIGA for more detailed accounting tracking and information. After coordination with the central SIAF direction, SIAF allows the Financial Director to have access and monitor, via internet, the accounting of the RGs. Each RG would prepare its own financial statements, while PDV will be in charge of the consolidation process of the financial statements, monitoring and reporting.
Before project effectiveness, the project should make sure all RGs have the required capacity to produce financial statements and RGs and PVD are interconnected. This interconnection should be stipulated in the inter-institutional agreements between PVD and each involved RG.

Financial Statements

PVD would consolidate the financial statements using information provided by the RGs. Thus uniformed accounting codes are necessary. PVD should take care of the harmonized codification of sources and uses of funds.

The project consolidated financial statements required by the Bank are the following:

- Statement of Sources and Uses of Funds;
- Statement of Cumulative Investments;
- Statement of Requests for Reimbursement (SOEs), and
- Statement of the Special Account

The financial statements will include all sources and uses of funds of the whole project. They should be prepared in the local currency and at the end of each current fiscal year as well as for the previous year or period in accordance with the accounting principles used in Peru, which are compatible with the IASC's accounting standards. The financial statements should include notes to the financial statements to disclose additional information. If it is necessary adequate reconciling schedules should be included in cases in which line items that normally matches do not do.

Although the financial statements required by IADB are similar to the ones required by IBRD, the content varies. In order to avoid duplication of work and double reporting for the current co-financed project, IBRD's and IADB's FM teams has undertaken the harmonization of donors' financial statement requirement and in accordance with audit requirements. (to adjust after

Friday's meeting)Therefore, PVD would submit only one version of uniformed consolidated financial statements to the banks that will be used for auditing, monitoring and reporting.

Financial Monitoring Reports

The harmonized (with initiative of the Bank's FM team) annual financial statements, prepared on the cash basis, will follow National Norms, which are acceptable to the Bank. In addition to the annual financial statements (for auditing purposes), PVD will prepare semi-annual financial statements for the Financial Monitoring Reports (FMRs). The Bank's FM team, in order to avoid duplication of work, took the initiative and harmonized the format of the FMRs with the SNIP and the IADB. The FMRs would be composed by project financial statements, physical progress and procurement sections. For reporting purposes the project's financial statements would include(i) the Statement of Receipts and Payments by Funding Source (with expenditures classified by budgetary line and/or disbursement category); (ii) Uses of Funds by Project Activities (including budget comparison); and (iii) the Special Account Reconciliation Statement.

The FMRs would contain the Sources and Uses of Funds and Uses of Funds by Project Components and Activities, Special Account reconciliation, comparison of financial expenditures with Physical Progress, Procurement Plan, and SNIP table.

PVD would prepare the harmonized financial statements and submit only one version of uniformed consolidated financial management reports to the IBRD and the SNIP within 45 days after the end of each calendar quarter for such period. FMRs harmonization with the IADB is ongoing and expected to be achieved by the end of the year (before effectiveness).

Finalization of the form and content of the FMRs and the systems and procedures to be implemented in order to generate the reports are conditions of negotiations.

Audit Arrangements

The implementing Unit (PVD) will be responsible for preparing all the financial statements and reports required.

Annual project financial statements will be audited in accordance with International Standards on Auditing (ISAs) issued by the International Federation of Accountants (IFAC), by an independent firm acceptable the Bank. The audit will be performed in accordance with terms of reference (TORs) approved by the Bank and the audit opinions should cover the project financial statements, Special Account, Statement of Expenditures (SOEs), compliance with loan agreement and applicable financial laws and regulations.

Auditors would perform at least one interim inspection per year in order to promptly identify areas that require attention of the Project's management. Such reviews will timely identify problems related to accounting or/and internal control. After each interim visit a memorandum on internal controls (management letter) would be produced to ensure that corrective actions are addressed prior to year end.

For the current co-financed project, World Bank's and IADB's FM teams undertook the harmonization of donors' audit requirement in order to perform only one audit acceptable by both institutions and in accordance with Peruvian state legislation. The teams agreed to use as a basis for the preparation of TORs the harmonized ones used for the IBRD/IADB co-financed project PROTRANSORTE, in Lima-Peru.

Conditions

Negotiations: (1) Draft governing regulations of PVD to give it expanded powers to manage the project. Finalization of the draft FMRs and operating procedures to ensure timely generation of same.

Effectiveness: Satisfactory Implementation of the Financial Management Action Plan.

Action Plan

As a result of the Assessment the action plan was proposed to strengthen institutional capacity. In the discussions with the task team and project, it was decided that all important considerations for Financial Management should be included on the Operations Manual. The form and index for the manual was agreed upon during the technical discussions, leading up to negotiations and the project has submitted a Draft Operations Manual for the Bank's Review. This resulted in changes to the target dates originally set in the Action Plan. The status at the end of the negotiations is reflected below. In order to declare effectiveness, the Financial Management team will visit the project and confirm that financial management capacity is in place to ensure that the Operations Manual can be effectively implemented.

Activity	Responsible	Target Date/ Event	Status at Negotiations
Legal			
Creation of the Multi-sector Advisory Comity	PCM	Dated Covenant	Pending
Revision of the governing regulation of PVD in order to broaden its functions and technical attributes as the Project Implementation Unit	PVD	Prior to effectiveness	Draft Ministerial Resolution has been prepared
Formal creation of the PIU	MTC	Prior to effectiveness	Draft Ministerial Resolution has been prepared
Preparation of the standard institutional and operational arrangements between PVD and RGs	PVD	Inclusion in Operations Manual	Accomplished
Flow of Funds			
Flow of Funds design decision	IBRD/IADB/PVD	Prior to appraisal	Accomplished
Training in financial management,	PVD/RGs	Project Launching	

including planning and budgeting using country systems.			
Organization and Staffing			
Preparation and submission of TOR for staff of PVD and RGs to bank for non objections.	PVD	Inclusion in Operations Manual	Accomplished
Formal nomination of the FM director	PVD	Prior to negotiations	Accomplished
Full staffing of PVD and at least six (6) RGs (including procurement specialists).	PVD/RGs	Prior to disbursements	
Training in cultural and technical change in PVD and RGs.	PVD	Project Launching	
Training in horizontal communication and cross functional team collaboration.	PVD	Project Launching	
Participation of Project Financial Administration and Internal audit staff in Bank Disbursement, Procurement and Financial Management Training.	IBRD/PVD/RGs	Project launching	
Operational Manual			
Submission of draft Manual to the Bank for review including institutional arrangements, staff functions, accounting policies and procedures, basis of accounting, chart of accounts tailored to include project components, disbursement categories and financing source, internal controls, segregation of duties, fixed assets and records management procedures.	PVD	Prior to negotiations	Accomplished
Provision of comments and recommendations.	BM	Prior to effectiveness	
Submission of revised draft to Bank to provide its no-objection.	PVD	Prior to effectiveness	
External Audit			
Preparation of TORs for audit and submission to Bank and BID for no-objection.	PVD	Prior to negotiations	Accomplished
Submission of approved TORS to the CGR to initiate the process of selection and contracting of external auditors. Or obtainment of waiver from the CGR for hiring of the external auditors.	PVD	Within three months of effectiveness	
Appointment of external auditors.	PVD/	Within six (6) months of effectiveness	
Safeguard over Assets (physical and information)			
Implementation of Fixed Asset Policies and Procedures including physical	PVD	Inclusion in Operations Manual	Accomplished

inventories, storage/transfer/distribution/retirements of assets etc.			
Implementation of Records Management System	PVD	Within one (1) year of effectiveness	
Financial Reporting and Monitoring			
Submission of format of FMRs and procedures for data collection and report generation of same, for the Bank to provide its no-objection.	PVD	Prior to negotiations	Accomplished
Integrated Financial Management System			
Implementation of Integrated Information systems.	PVD/RGs	Inclusion in Operations Manual	Accomplished

Supervision Plan

Given the risk profile of the project and the extensiveness of the Financial Management Action Plan a financial management supervision mission may be performed prior to effectiveness. This mission will focus in the Organizational Arrangements, and the Information and Reporting Systems which are to be implemented and involve an exhaustive review of the Accounting Systems and Procedures. During the first year of implementation it is recommended that two supervision missions be performed, supplemented by semi-annual reviews of Financial Monitoring Report (FMRS). Thereafter on-going supervision should be through continuation of the FMR desk reviews, annual review of the external audit reports, and at least one supervision mission per year.

Annex 8: Procurement Arrangements

PERU: Regional Transport Decentralization

A. General

Procurement for the proposed project would be carried out in accordance with the World Bank's "Guidelines: Procurement Under IBRD Loans and IDA Credits" dated May 2004; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, and the provisions stipulated in the Legal Agreement. The various items under different expenditure categories are described in general below. For each contract to be financed by the Loan, the different procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame are agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

Participation of contractors from non-IDB member countries may be unlikely. However, the procurement advertisements and bidding documents will clearly state that participation is opened to firms and consultants from all countries under the World Bank Procurement Guidelines, and that the financing will be secured by the World Bank loan. In the event that the bidder who has submitted the lowest evaluated bid is from a country not eligible under IDB guidelines, the World Bank will authorize an increase in the pari-passu established in order to cover IDB's portion and meet the expenditures incurred in respect of that contract. The IDB will authorize a similar increase in respect of other contracts eligible for IDB financing until the balance is reestablished.

Procurement of Works. Works to be procured under this project would include: road rehabilitation and maintenance activities. Beneficiary Regional Governments eligible for execution of Sub-projects will be directly responsible for management of bidding processes, under close coordination and supervision by PVD's Promotion and Transfer Management Department. Although no works contracts are expected to be procured through ICB procedures, as provided in the procurement plan; should any contract be procured with use of such procedures, it would be financed with IBRD's loan proceeds. Works rehabilitation contracts and maintenance will be awarded with the use of NCB for contracts estimated to cost less than US$3.0 million and above US$.25 million equivalent per contract; and Price Comparison (shopping) procedures for contracts estimated to cost US$.25 million or less equivalent per contract. While routine maintenance contracts below US$50,000 equivalent per contract will be procured using Direct Contracting procedures through qualified local micro-enterprises. Standard project documents for procurement under NCB and shopping procedures acceptable to the Banks were agreed during the project appraisal mission.

Force account for execution of mechanized road maintenance (*perfilados*) by eligible regional governments for contracts with estimated values not to exceed US$100,000 per contract will be also financed by the project. Works contracted under these procedures would be financed under Component C for road maintenance. In order to ensure that cost-effectiveness is held within the

financial parameters agreed with PVD, contracts under this category would not exceed a fixed cost of US$600.00 per Kilometer per year of regional road.

Procurement of Goods. Goods to be procured under the project will consist of computer equipment, software licenses and vehicles, as part of project agency institutional strengthening. Procurement will be carried out under contracts awarded on the basis of NCB procedures and project standard documents acceptable to the Bank.

Selection of Consultants. At project implementation stage, consultant services will be required to perform technical and feasibility studies, detail engineering designs, institutional capacity assessments, works supervision, strategic studies and evaluations, and provision of some training activities. Selection of consultant firms will be carried out with the use of QCBS, CQS, FBS, LCS, and SSS, as appropriate. Individual Consultants will be selected on the basis of their qualifications giving consideration to their academic background; overall work experience; and appropriateness for required specific assignments under relevant TOR. Short lists of consultant firms for services with estimated values below US$350,000 equivalent per contract may comprise entirely national consultants in accordance with the provisions of paragraph 2.7 of the Bank Consultant Guidelines.

Procurement of training-related goods and non-consulting services. Procurement of training materials; rental of training facilities and equipment; and any other goods and services, other than consulting services, related to training for the organization and conducting of seminars and workshops in areas such as environmental management, roads maintenance; project management; roads project preparation and evaluation; GIS management; financial management; roads project-related auditing and control; procurement management and contract administration will be financed by the project. Goods and materials, and non-consulting services related to training will be procured with the use of Price Comparison (shopping) procedures on the basis of obtaining at least 3 responsive quotations from local qualified suppliers.

Operating Costs. Under this cost category, the project will finance expenses needed to support project management-related activities which enable project coordination and monitoring, including insurance, vehicle and equipment operation, transport, travel, per diem, supervision costs and local contractual staff salaries but excluding salaries of non-project staff of the Borrower's civil service at the national and regional levels.

Implementation of project procurement shall be systematically monitored on the basis of yearly-submitted procurement plans that will include the particular contracts and proposed methods for procurement of works, goods and consulting services, consistent with the ones permitted under the Loan Agreement. Therefore, the levels of aggregated amounts for project financing under each type of contract is not necessary to include.

A detailed description of the particular methods for procurement of works, goods and non-consulting services, and selection of consultants agreed for project implementation shall be included in the Operations Manual. Project standard procurement documents will be also incorporated in a specific Annex to the Manual.

B. Assessment of the Agency's Capacity to Implement Procurement

Procurement activities will be carried out by PROVIAS DEPARTAMENTAL (PVD) and participating Regional Governments under the close coordination and supervision by the former agency. The Implementing Agency is staffed by approximately 170 professional staff. Its key staff is comprised of an Executive Director; a Project Manager; a Maintenance Manager; a Promotion & Transfer Manager; an Administrative-Finance Manager; a Planning & Budget Manager; an Institutional Control Office (Internal Auditing) reporting to the Office's Comptroller; and a Legal Department, and the procurement function is staffed by a Procurement Officer in charge of providing overall procurement planning, coordination and assistance to PVD departments and regional governments engaged in management of procurement processes. Responsibility for overall coordination with PVD's technical and administrative internal department and with executing agencies outside PVD will be carried out by the Promotion & Transfer Management Department.

An assessment of the capacity of the Implementing Agency to implement procurement actions for the project has been carried out (by Keisgner D. Alfaro on 01/27/2005). The assessment reviewed the organizational structure for implementing the project and the interaction between the project's staff responsible for project procurement functions and the Ministry's relevant central unit for administration and finance.

The key issues and risks concerning procurement for implementation of the project have been identified and include: i) although consistent with its new decentralized role, a proposed organizational structure has not been fully implemented yet; ii) lack of prior experience and skilled staff in both PVD and Regional Governments to implement project procurement under Bank guidelines and procedures; and iii) lack of an integrated project management information system with the capacity to carry out monitoring, control and progress reporting in order to enable an efficient project coordination and decision-making. The corrective measures which have been agreed are: i) a new organization satisfactory to the Banks should be implemented by PVD not later than project appraisal mission; ii) hiring of an experienced consultant before loan negotiations; iii) provision of training in operation manual procedures and Bank procurement guidelines and procedures to procurement staff in both PVD and regional governments not later than project launching mission and; iv) implementation of an integrated project management information system by end of March 2006.

The overall project risk for procurement is AVERAGE.

C. Procurement Plan

At project appraisal mission the Borrower submitted a draft procurement plan which provided the basis of identification and establishment of procurement methods for implementation of project procurement. A final project procurement plan which incorporates Bank comments and recommendations and agreements -following a discussion of such plan with the agency's management team during appraisal- shall be submitted shortly after the end of appraisal mission and cleared by the Bank-team Procurement Specialist before loan negotiations. The final plan to be agreed with will be available at the offices of PROVIAS DEPARTAMENTAL located on Avda. Bolivia 120 Centro Cívico Piso 14, Lima, Perú. It will also be available in the project's

database and posted in the Bank's external website. The project agency will update the Procurement Plan annually and submit it to the Banks team for prior review and approval before any procurement action may be taken. Also, PROVIAS DEPARTAMENTAL shall implement project procurement in a manner consistent with the methods and conditions specified in the agreed Procurement Plans.

D. Frequency of Procurement Supervision

In addition to the prior review supervision to be carried out from Bank offices, the capacity assessment of the Implementing Agency has recommended to conduct one supervision mission to visit the field to carry out post review of procurement actions. Whenever possible, the supervision missions will be jointly performed by the two Banks.

Table A.8.1: Thresholds for Procurement Methods and Prior Review*

Expenditure Category	Contract Value Threshold (US$ thousands)	Procurement Method	Contracts Subject to Prior Review (US$ thousands)
1.Works	Contract = >3000	ICB	All
	3000> Contract >250	NCB	Contracts = > $2.0 mill, and the first 2 contracts and annual review of procurement plan. Post-review: Random sample of contracts
	Contract < = 250	3 quotations (Shopping)	First 2 contracts and annual review of procurement plan.
	Contract < 50 (Routine Maintenance)	Direct Contracting	Post-review: sample of contracts
	Contract < 100	Force Account	Post-review of sample of contracts
2. Goods and Non-Consulting Services	Contract = > 250	ICB	All
	250 > Contract > 50	NCB	Contracts = > 200 and the first two contracts
	Contract < = 50	National Shopping	First 2 contracts and, annual review of procurement plan. Post-review: Random

			sample of contracts
3. Consulting Services and Training			
3.1 Firms	Contract = > 100	QCBS	All contracts costing $200,000 or more, including TOR, RFP, shortlist of firms, full review of technical and final evaluation reports, and final negotiated contract.
	Contract < 100	QCBS, LCS, CQS, SBPF and SSS	Annual review of the selection plan. Post-review: Random sample of contracts
3.2 Individuals	Contract = > 100	IC	All contracts estimated to cost $50,000 or more, including TOR, CVs, and Form of Contract
	Contract < 100	IC, and SSS	Annual review of the selection plan Post review: Random sample of contracts

*Thresholds generally differ by country and project. Consult Operational Directive (OD) 11.04, "Review of Procurement Documentation," and contact the Regional Procurement Adviser for guidance.

Total value of contracts subject to prior review: **$27.90 million**

E. Details of the Procurement Arrangements Involving International Competition

1. Goods, Works, and Non Consulting Services

(a) List of contract packages to be procured following ICB and direct contracting:

1	2	3	4	5	6	7	8	9
Ref. No.	**Contract (Description)**	**Estimated Cost**	**Procurement Method**	**P-Q**	**Domestic Preference (yes/no)**	**Review by Bank (Prior / Post)**	**Expected Bid-Opening Date**	**Comments**
	None							

(b) ICB contracts estimated to cost above $3.0 million for works per contract; $250,000 for goods per contract and all direct contracting will be subject to prior review by the Bank.

2. Consulting Services

(a) List of consulting assignments with short-list of international firms.

1	2	3	4	5	6	7
Ref. No.	**Description of Assignment**	**Estimated Cost ($)**	**Selection Method**	**Review by Bank (Prior / Post)**	**Expected Proposals Submission Date**	**Comments**
	Works Supervision - Road Paimas - Ayabaca	212,000	QCBS	Prior Review	03/2006	
	Works Supervisión Road Pte. Pallar – El Molino	224,000	QCBS	Prior Review	02/2007	
	Works Supervision Road Cumba – El Triunfo	238,000	QCBS	Prior Review	05/2007	
	Works Supervision Road San Gregorio – San Miguel	228,000	QCBS	Prior Review	06/2007	
	Engineering Design Road Puente Pallar – El Molino	224,000	QCBS	Prior Review	06/2006	
	Engineering Design Road Sausal – Dv Cascas	232,000	QCBS	Prior Review	07/2007	
	Engineering Design Road Cumba – El Triunfo	238,000	QCBS	Prior Review	09/2006	
	Engineering Design Road San Gregorio – San Miguel	228,000	QCBS	Prior Review	10/2006	
	Engineering Design Road Aricapampa-Dv Chillia	208,000	QCBS	Prior Review	08/2006	
	Engineering	200,000	QCBS	Prior	08/2006	

	Design Road Cuñumbuque - San Jose de Sisa			Review		
	Engineering Design Road Corral Quemado – El Triunfo	240,000	QCBS	Prior Review	06/2007	
	Engineering Design - Carretera Candarave - Binacional	236,000	QCBS	Prior Review	06/2007	

(b) Consultancy services estimated to cost above $200,000 per contract and single source selection of consultants firms will be subject to prior review by the Bank.

(c) Short lists composed entirely of national consultants: Short lists of consultants for services estimated to cost less than $350,000 equivalent per contract, may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

Annex 9: Economic and Financial Analysis
PERU: Regional Transport Decentralization

A. Beneficiaries

The main beneficiaries of the project will be the population living in the vicinity of the roads to be improved and the long-distance traffic. The populations currently being served by poor condition roads will gain reliable access through improved roads to social services and markets. They will also benefit from new services likely to spring up near the improved roads, which will result in lower costs of basic necessities. The improved roads carry long distance travel, and those road users will also be beneficiaries, substantially reducing their vehicle operating cost and time of travel.

B. Economic Analysis Methodology

The roads to be included in the program will consist of *low-volume roads* at least in relative terms, typically with daily traffic higher than 40 Average Annual Daily Traffic (AADT), which will produce benefits not only in alleviating isolation but also in reducing transport costs to the long-distance traffic they would normally carry. To define the proper level of investments of each project road and ensure economic feasibility *a Cost Benefits Analysis (CBA)* will be done for all road works and the corresponding economic indicators will be determined, such as the Economic Rate of Return (ERR) and Net Present Value (NPV). A *Cost Efficiency Analysis (CEA)* will be done for *very-low volume roads*, generally with a daily traffic less than 40 AADT and selected on the basis of their contribution to accessibility, assessing the minimum investment cost needed to provide basic all-weather access per beneficiary population.

The cost-benefit analysis will be done using the Road Economic Decision Model (RED) developed by the World Bank for the economic evaluation of investments and maintenance alternatives for low-volume roads. The RED model adopts the consumer surplus approach to estimate project benefits that are comprised of road user costs (vehicle operating costs, passenger time costs, and accident cost) savings, which are estimated using road user costs relationships from the Highway Development and Management Model (HDM-4). The RED Model is customized to the characteristics and needs of low-volume roads, such as the high uncertainty of the assessment of the model inputs, the importance of speeds for model validation, and the need for a comprehensive analysis of generated and induced traffic. The investment on each project road should yield an ERR higher than 14 percent to be considered acceptable, which is the standard discount rate adopted in Peru since 2000. For all roads, the beneficiary population will also be computed in order to be able to determine the overall impact of the project on the rural population.

C. Selection of Road Investments

Regional Governments with the preparation of a Participatory Regional Road Plan are doing the selection of the road investments to be included in the project. The Road Plan, aligned with existing regional development plans, elaborates a diagnostic of the road sector in a particular region, analyzes the supply and demand for transport services and infrastructure, and prioritizes

the road investment options, towards identifying the sub-project priorities that could be funded under the project. At appraisal time, the preparation of a Participatory Regional Road Plan is in progress on thirteen Regional Governments and the remainder Regional Governments are expected to start the process soon.

The methodology of the preparation of a Road Plan considers: (a) compilation of primary and secondary information characterizing the Regional Governments in general, physical, social and economic terms; (b) evaluation of population trends, resources and economic opportunities; (c) definition of development nodes and their area of influence; (d) diagnostic of the road network in terns of condition, accessibility, traffic, and flow of commercial products; (e) identification of the corridors of economic and territorial regional integration, and the definition and prioritization of road sectors strategic road axes; (f) prioritization and stratification of the road sections (sub-projects) located in the Regional Governments; and (g) evaluation of the financial capacity of the Regional Government and other institutional aspects.

A Participatory Regional Road Plan utilizes a multi-criteria priority index to rank the road sections and define priorities. The index is being computed for each road section using the following social, economic and technical criteria:

- Population: measures the beneficiary population living along the road, independent of the poverty level, divided by the road section length;
- Poverty: measures the poverty index of the District divided by the poverty index of the Department;
- Connectivity: measures the sum of length of feeder roads that connect to the road section divided by the road section length;
- Transitability: measures the number of days per year when the road is not open to traffic;
- Traffic: measures the daily traffic projected to year 10;
- Transport Service: assigns 1 if there are many road transport services per day, 0.9 if the frequency is daily, and 0.8 if the frequency is maximum one week, and 0 for the other cases;
- Loading: measures the trucks cargo loading;
- Transport Cost/Commodity Price: measures the transport cost of a typical commodity divided by the cost of the commodity;
- Production: measures the gross production value of the agricultural, mining and industrial sectors divided by the gross domestic product of the Department; and
- Tourism: assigns 1 for first class tourism centers; 0.8 for second class, 0.6 for third class, and 0 for the rest.

To produce unit values comparable among different road sections, the variables are normalized to unit value by dividing the value assigned to each road by the maximum value established for

the corresponding value. By ordering the road sections in descending order of the multi-criteria priority index it is possible to establish an initial prioritization of the roads to be rehabilitated. Other factors, such as connectivity and equity, are used to complement the index to obtain a final ranking and work program.

D. Rehabilitation Program Cost-Benefit Evaluation

The rehabilitation program to be implemented by a Regional Government will be defined by the Participatory Regional Road Plan that is being prepared by the Regional Government. Therefore, MTC's Provias Departamental will perform the economic evaluation of the rehabilitation program when the Participatory Regional Road Plans are being completed. In the interim, on the basis of the currently available data on Departmental roads and average road works costs, a global economic evaluation was done for a representative road rehabilitation program considering Departmental roads with high traffic in each Regional Government, with the objective of broadly judge the economic justification of the program. The evaluation was done with the RED model for analysis period of 15 years and adopting a discount rate of 14 percent. The evaluation considered 51 tentative road sections, totaling 2,230 km, with traffic ranging from 50 to 317 AADT and an average percentage of trucks and buses of 40 percent. Table 9.1 presents the length of the Departmental roads network and the representative rehabilitation program.

Table 9.1 Departmental Roads and Representative Rehabilitation Program Length

	Departmental Roads					Representative
Department	Paved (km)	Gravel (km)	Earth (km)	Track (km)	Total (km)	Rehabilitation Program (km)
Amazonas	6	121	71	210	408	78
Ancash	42	328	521	176	1,067	
Apurimac	0	224	249	72	544	
Arequipa	222	762	323	111	1,417	167
Ayacucho	0	258	196	437	891	80
Cajamarca	0	304	330	105	739	153
Cuzco	154	1,251	215	109	1,730	77
Huancavelica	0	302	355	80	737	195
Huanuco	7	71	164	172	414	200
Ica	74	124	95	44	336	58
Junín	34	482	67	7	590	233
La Libertad	70	255	442	102	870	278
Lambayeque	80	24	0	0	104	
Lima	157	57	86	158	458	88
Loreto	13	269	26	80	387	
Madre De Dios	0	46	0	0	46	
Moquegua	0	0	188	0	188	
Pasco	0	231	329	61	621	190
Piura	125	179	68	206	578	53
Puno	55	313	377	411	1,155	119
San Martín	0	147	0	25	173	71
Tacna	31	241	171	40	483	84
Tumbes	36	28	20	234	318	107
Ucayali	0	0	0	0	0	
Total	1,106	6,015	4,291	2,839	14,251	2231

For the purpose of the economic evaluation, rehabilitation costs were estimated for five possible rehabilitation alternatives, representing alternative levels of service for an unpaved road, and for the alternative of paving a road. Table 9.2 presents the corresponding investment costs, annualized maintenance costs and average roughness over the evaluation period. The without project alternative consists of keeping a road in poor condition (roughness = 17 IRI) with

minimum routine maintenance. The annualized maintenance costs include routine maintenance, gradings and gravel resurfacing.

Table 9.2 Project-Alternatives for Rehabilitation Program

Project-Alternative	Investment (US$/km)	Annualized Maintenance Cost (US$/km-year)	Average Roughness (IRI)
Paving	250,000	7,000	3.0
Rehabilitation V	90,000	5,050	7.0
Rehabilitation IV	70,000	4,400	8.5
Rehabilitation III	50,000	3,367	10.0
Rehabilitation II	30,000	2,900	11.5
Rehabilitation I	20,000	1,975	13.0

Road user costs were estimated for five vehicle types comprising passenger car, four-wheel drive vehicle, bus, and medium and heavy trucks. Table 9.3 presents the average vehicle fleet characteristics and economic unit costs. This information is updated yearly by the MTC Dirección General de Planificación y Presupuesto to be used on all economic evaluations in Peru. The value of time for car passengers was estimated to be US$ 1.20 per hour considering an average income of 900 Soles per month, 176 working hours per month, non-working time being 25 percent of working time, and 70 percent of work related trips. For bus passengers an average income of 450 Soles per month was considered.

Table 9.3 Vehicle Fleet Characteristics and Unit Costs

	Car	4 Wheel-drive Utility	Bus	Medium Truck	Heavy Truck
Economic Unit Costs					
New Vehicle Cost (US$/vehicle)	11,855	18,579	89,700	86,250	103,500
Fuel Cost (US$/liter)	0.43	0.43	0.44	0.44	0.44
Lubricant Cost (US$/liter)	2.32	2.32	2.32	2.32	2.32
New Tire Cost (US$/tire)	37.40	63.80	274.10	274.10	346.40
Maintenance Labor Cost (US$/hour)	2.04	2.04	2.35	2.35	2.35
Crew Cost (US$/hour)	0.00	0.78	2.74	2.12	2.27
Passenger Time (US$/passenger)	1.2	1.2	0.6	0.6	0.6
Interest Rate (%)	14.00	14.00	14.00	14.00	14.00
Utilization and Loading					
Kilometers Driven per Year (km)	25,000	40,000	120,000	90,000	100,000
Hours Driven per Year (hr)	480	960	2496	2400	2400
Service Life (years)	10	8	10	10	10
Percent of Time for Private Use (%)	100	0	0	0	0
Gross Vehicle Weight (tons)	1.4	2.2	13.6	15.4	23.1
Number of Passengers	3	3	4	1	1

Table 9.4 presents typical vehicle operating costs, in US$ per vehicle-km, for different vehicle types and roughness level.

Table 9.4 Typical Road User Costs per Roughness Level (US$/vehicle-km)

Roughness (IRI)	Car	4 Wheel-drive Utility	Bus	Medium Truck	Heavy Truck
2	0.17	0.19	0.84	0.56	0.73
4	0.17	0.20	0.90	0.60	0.79
6	0.19	0.22	0.99	0.67	0.88
8	0.20	0.24	1.09	0.75	0.97
10	0.23	0.28	1.21	0.83	1.07
12	0.25	0.31	1.33	0.90	1.17
14	0.28	0.35	1.45	0.98	1.28
16	0.31	0.38	1.58	1.06	1.39
18	0.34	0.42	1.71	1.14	1.50
20	0.36	0.45	1.84	1.22	1.61

Table 9.5 presents the typical traffic composition per traffic range. The average annual traffic growth rate was estimated to be 2 percent per year for passenger vehicles and 4 percent for trucks based on past trends of population growth for passenger vehicles and economic growth for trucks. The generated traffic was estimated assuming a price elasticity of demand equal to 0.5. This is a conservative assumption of the generated traffic based on empirical evidence in developing countries.

Table 9.5 Typical Traffic Composition (%)

Traffic (AADT)	Car	4 Wheel-drive Utility	Bus	Medium Truck	Heavy Truck
30-50	29%	41%	7%	22%	1%
50-100	30%	35%	6%	23%	6%
>100	27%	33%	12%	26%	2%

Based on the economic comparison of the project-alternatives, a project-alternative was selected for each road that yields a reasonable rate of return. The evaluation shows that the representative rehabilitation program would have an ERR of 26 percent with a global NPV of US$ 63.4 million. The ERR would fall to 22 percent with a 20 percent increase in investment costs, and to 21 percent if benefits were 20 lower than estimated. The switching value analysis shows that for the ERR to fall to 14 percent, investment costs would need to be 1.7 times higher, or benefits 41 percent lower than estimated. Tables 9.6 and 9.7 summarize the results that indicate a satisfactory economic justification for the representative program. Overall, the representative rehabilitation program will provide some 1,312,000 rural inhabitants with access to an all-weather road.

Table 9.6 Representative Rehabilitation Program Economic Evaluation

	Length (km)	Motorized Traffic (AADT)	Total Investment (Million US$)	Investment per km (US$/km)	ERR (%)	NPV (Million US$)
Total	2,231		113.2		26%	63.4
Average		115		50,759		

Table 9.7 Representative Rehabilitation Program Sensitivity

Economic Rate of Return (ERR)			
Base (%)	A: Cost +20% (%)	B: Benefits -20% (%)	A & B (%)
26%	22%	21%	17%

Cost increase for ERR to fall to 14% = 1.70 times
Benefit decrease for ERR to fall to 14% = 0.59 times

E. First Year Rehabilitation Program Cost-Benefit Evaluation

MTC's Provias Departamental selected eight roads to be rehabilitated during the first year of the project. These roads have completed technical and economic studies. Their combined length is 251.1 kilometers and their total cost is US$ 11.7 million. One road was selected on each of the eight Regional Governments that initially participate in the project (Junín, Pasco, Ica, Cajamarca, Piura, Cusco, San Martín, and Ayacucho). The eight Regional Governments were selected with support from a multi-criteria analysis that considered the following criteria: (a) length of Departmental roads; (b) index on economic potential; (c) average traffic; (d) index of lower human development; (e) beneficiary population; (f) resources assigned to transport sector; and (g) index of predisposition to participate in the program. Table 9.8 presents the multi-criteria results that show the eight Regional Governments being among the thirteen with highest priority.

Tabl .8 Priori ation of Regional Gover ients

No.	Department	Departmental Roads Length Km	%	Economic Potential %	Average Traffic AADT	%	Human Development Index	%	Beneficiary Population Persons	%	Transport Resources Soles/km	%	Participation Index Value	%	Index %
1	Junín	590	0.04	0.06	249	0.10	0.439	0.04	462,232	0.15	17,724	0.05	5	0.08	0.073
2	Pasco	621	0.04	0.11	216	0.09	0.438	0.04	94,066	0.03	11,919	0.03	5	0.08	0.067
3	Ancash	1,067	0.07	0.18	35	0.01	0.424	0.04	35,743	0.01	3,172	0.01	3	0.05	0.062
4	Arequipa	1,417	0.10	0.05	91	0.04	0.433	0.04	492,487	0.15	8,492	0.02	3	0.05	0.058
5	Ica	336	0.02	0.01	202	0.09	0.344	0.03	427,845	0.13	12,835	0.04	5	0.08	0.054
6	Lambayeque	104	0.01	0.01	314	0.13	0.424	0.04	15,050	0.00	14,742	0.04	5	0.08	0.050
7	Cuzco	1,730	0.12	0.04	66	0.03	0.508	0.05	266,384	0.08	4,359	0.01	3	0.05	0.049
8	Cajamarca	739	0.05	0.09	43	0.02	0.509	0.05	36,952	0.01	7,697	0.02	5	0.08	0.048
9	Piura	578	0.04	0.02	173	0.07	0.461	0.04	95,251	0.03	16,312	0.05	5	0.08	0.047
10	San Martín	173	0.01	0.03	64	0.03	0.445	0.04	45,095	0.01	67,405	0.19	3	0.05	0.045
11	Puno	1.155	0.08	0.03	45	0.02	0.459	0.04	293,534	0.09	7,532	0.02	3	0.05	0.044
12	Lima	458	0.03	0.07	147	0.06	0.331	0.03	118,710	0.04	2,509	0.01	0	0.00	0.041
13	Ayacucho	891	0.06	0.02	61	0.03	0.540	0.05	164,527	0.05	6,161	0.02	3	0.05	0.037
14	Tumbes	318	0.02	0.01	137	0.06	0.394	0.04	231,679	0.07	2,090	0.01	3	0.05	0.036
15	Amazonas	408	0.03	0.02	75	0.03	0.491	0.05	20,229	0.01	10,873	0.03	5	0.08	0.034
16	La Libertad	886	0.06	0.03	110	0.05	0.447	0.04	60,112	0.02	8,828	0.02	0	0.00	0.033
17	Huancavelica	737	0.05	0.02	87	0.04	0.550	0.05	83,556	0.03	14,661	0.04	0	0.00	0.033
19	Moquegua	188	0.01	0.06	76	0.03	0.352	0.03	39,857	0.01	14,880	0.04	0	0.00	0.033
18	Loreto	387	0.03	0.03	0	0.00	0.483	0.04	55,692	0.02	32,358	0.09	3	0.05	0.032
20	Huanuco	414	0.03	0.02	80	0.03	0.521	0.05	69,102	0.02	20,758	0.06	0	0.00	0.032
21	Tacna	483	0.03	0.04	51	0.02	0.373	0.03	18,195	0.01	12,365	0.03	0	0.00	0.027
22	Apurimac	544	0.04	0.01	38	0.02	0.563	0.05	53,434	0.02	7,244	0.02	0	0.00	0.024
23	Madre de Dios	46	0.00	0.01	13	0.01	0.431	0.04	3,577	0.00	33,987	0.09	0	0.00	0.021
24	Ucayali	0	0.00	0.02	0	0.00	0.511	0.05	0	0.00	20,346	0.06	0	0.00	0.018
ıotal		14,268	1.00	1.00		1.00		1.00	3,183,309	1.00		1.00		1.00	1.000

- Economic potential, average traffic and human development have a weight equal to 0.20
- Departmental roads length, beneficiary population, transport resources and participation index have a weight equal to 0.10

The eight roads to be rehabilitated were selected considered the following criteria: (a) traffic higher than 70 AADT; (b) average length of 25 kilometers; (c) connection to important locations, such as Departmental or District Capitals; (d) no negative impact on the environment; and (e) approved pre-feasibility study. Table 9.9 presents the basic road characteristics, considering that the roads in Junín and Pasco were subdivided into two homogeneous road sections. The beneficiary population is defined as the rural population living along the road up to 5 kilometers on each side of the road.

ıabilitation Program B sic Charac ristics

Department	Road Section	Length (km)	Terrain Type	Motorized Traffic (AADT)	Trucks & Buses % (%)	Beneficiary Population (persons)	Beneficiary Population (persons/km)
Junín	Palian – Vilcacoto	3.9	Flat	148	14%	10,095	2,588
Junín	Vilcacoto – Abra Huaytapallana	24.4	Hilly	80	26%	62,385	2,557
Pasco	Pasco - Desvío Gollariquizga	14.5	Hilly	188	23%	31,589	2,179
Pasco	Desvío Gollariquizga - Tambopampa	18.6	Mountainous	183	11%	40,522	2,179
Ica	Chincha – Huancho	22.1	Hilly	128	54%	69,897	3,170
Cajamarca	Chilete Contumaza	40.2	Mountainous	74	30%	17,825	443
Piura	Paima – Ayabaca	53.4	Mountainous	130	36%	41,203	772
Cusco	Huambutio – Huancarani	28.0	Mountainous	119	57%	30,722	1,097
San Martín	Sacanche – Saposoa		Hilly	71	17%	15,352	706
Ayacucho	Cangallo – Huancapi	24.3	Mountainous	103	37%	18,520	762
Total		251.1				338,110	
Average				122	31%		1,645

Table 9.10 presents the economic evaluation results that indicate that the first year rehabilitation program has a solid economic return. The overall ERR for these roads is 25 percent, and all the roads have an ERR higher than 14 percent. The combined NPV of the first year rehabilitation program is US$ 5.58 million. Overall, the first year rehabilitation investments will provide some 338,000 rural inhabitants with access to an all-weather road.

Table 9.10 First Year Rehabilitation Program Economic Evaluation

Department	Road Section	Total Investment (Million US$)	Investment per km (US$/km)	ERR (%)	NPV (Million US$)	Investment per Population (US$/person)
Junín	Palian – Vilcacoto	0.1	31.4	34%	0.12	12.1
Junín	Vilcacoto - Abra Huaytapallana	0.8	31.3	20%	0.20	12.2
Pasco	Pasco - Desvío Gollariquizga	1.2	82.8	30%	0.89	38.0
Pasco	Desvío Gollariquizga - Tambopampa	1.8	96.5	16%	0.15	44.3
Ica	Chincha – Huancho	0.5	21.5	68%	1.28	6.8
Cajamarca	Chilete Contumaza	1.3	32.3	17%	0.20	72.8
Piura	Paima – Ayabaca	2.6	49.4	26%	1.41	64.0
Cusco	Huambutio – Huancarani	2.0	71.7	21%	0.57	65.3
San Martín	Sacanche – Saposoa	0.4	20.4	21%	0.14	28.9
Ayacucho	Cangallo – Huancapi	1.0	39.3	28%	0.63	51.6
Total		11.7		25%	5.58	
Average			47.7			39.6

Table 9.11 presents the sensitivity analysis for each road. The ERR would fall to 20 percent with a 20 percent increase in investment costs, and to 19 percent if benefits were 20 lower than estimated. The switching value analysis shows that for the ERR to fall to 14 percent, investment costs would need to be 1.6 times higher, or benefits 37 percent lower than estimated. The results indicate a satisfactory economic justification of the first year rehabilitation program.

Table 9.11 First Year Rehabilitation Program Sensitivity Analysis

		Economic Rate of Return (ERR)				
		Base	Cost +20%	Benefits -20%	Switching Values	
Department	Road Section	(%)	(%)	(%)	Cost	Benefits
Junín	Palian – Vilcacoto	34%	28%	27%	2.20	0.45
Junín	Vilcacoto - Abra Huaytapallana	20%	16%	15%	1.33	0.75
Pasco	Pasco - Desvio Gollariquizga	30%	25%	24%	1.93	0.52
Pasco	Desvío Gollariquizga - Tambopampa	16%	13%	12%	1.10	0.91
Ica	Chincha – Huancho	68%	57%	55%	4.42	0.23
Cajamarca	Chilete Contumaza	17%	14%	13%	1.20	0.83
Piura	Paima – Ayabaca	26%	21%	20%	1.67	0.60
Cusco	Huambutio - Huancarani	21%	17%	16%	1.36	0.74
San Martín	Sacanche - Saposoa	21%	17%	16%	1.39	0.72
Ayacucho	Cangallo - Huancapi	28%	23%	22%	1.83	0.55
Total		25%	20%	19%	1.60	0.63

Annex 10: Safeguard Policy Issues

PERU: Regional Transport Decentralization

I. INTRODUCTION

As part of the preparation and appraisal of the Regional Transport Decentralization Project (RTDP), a number of socio-environmental activities and instruments have been performed or applied, with the objective of ensuring the social and environmental sustainability of the project and complying with both the Peruvian socio-environmental legislation and the Bank safeguard policies.

One of the instruments that have been applied in this case is the Conceptual Framework for Project's Socio-environmental Management. This framework describes the procedures and responsibilities for socio-environmental management during the project cycle. This instrument is inspired from the Bank's Guidebook on Quick Social and Environmental Evaluation for Road Projects developed by the Bank's Quality Assurance Team (QAT), with the purpose of ensuring compliance with the Bank's safeguards policies. In this case, the framework has been applied to a sample of subprojects to be financed during the first year of project's implementation.

An evaluation of the institutional capacity of the various actors involved in the project has been performed, and a socio-environmental institutional strengthening plan has also been prepared.

In addition, during project preparation, it was agreed that a Strategic Environmental Assessment would be prepared for regional roads' management, with the objective of ensuring the inclusion of the social and environmental dimension in policies, plans and procedures. Ultimately, this is expected to strengthen the social and environmental management of the design, implementation and supervision of subprojects.

These activities and instruments have been agreed with the QAT team, as a Bank requirement for project's approval.

II. IMPACT EVALUATION

The project aims at rehabilitating or improving existing roads. No new construction has been considered that could affect the social and natural environment.

Below are listed the main activities that are susceptible to generate socio-environmental impacts during project implementation, along with the actions or measures that are proposed in order to prevent, mitigate or compensate these impacts.

Activities Susceptible to Generate Environmental Impact

During the phase previous to rehabilitation or periodic maintenance works, two main activities have been identified that could have a social or environmental impact:

- Selection of areas to store or park heavy road rehabilitation equipments
- Transport of gasoline and lubricants

During the phase of execution of the rehabilitation or periodic maintenance works, the following main activities have been identified that could have a social or environmental impact:

- Transport of equipments and gasoline;
- Management of lubricants and gasoline in the areas of intervention;
- Construction activities which can generate dangerous traffic conditions by interfering with the regular flow of vehicles;
- Transport of materials until final storage;
- Solid waste elimination in construction areas and work places;
- Ground excavation in zones with high archeological potential

Finally, during the phase of closing or finalization of the works, the following main activities have been identified that could have a social or environmental impact:

- Recuperation of areas used, when it is justified
- Management of sites that have been used to deposit used or broken equipments
- Replanting of the areas

Identification of Possible Social and Environmental Impacts:

Air pollution:
A few construction activities may generate the emission of particles into the atmosphere that could affect the natural environmental and the workers. These activities include: a) operation of equipments with the emission of gases produced by the combustion of petroleum derivates; b) exploitation of construction materials; c) transport of construction materials, among others.

Solid wastes:
The pollutants that will be produced during the phase of execution of the works include material residues and equipments' residues such as filters, tires, lubricants, garbage, among others.

Noise and vibrations:
The use of equipments during the phase of execution of the works, exploitation of construction materials and road improvement can generate noise levels affecting workers and local population (particularly in the case of urban roads).

Visual pollution:
The lack of environmental consideration during the execution of the works, such as for example the final disposal of used materials in the right of way, can affect the existing landscape.

Protected areas:
The execution of projects in areas declared under an environmental protection regimes or in zones of high sensitivity of the environment requires an integrated management. The project does not plan to intervene in protected areas. It will not modify existing rights of way that

present certain characteristics that promote the development of natural habitats (since they can act as biological corridors).

Modification of the physical characteristics of the areas:
Project resources will contribute to improving the physical and environmental characteristics of areas that are currently affected by problems of erosion and stabilization, which can impact the transitability of the road.

Impact on the cultural and physical patrimony:
An inadequate moving of ground in zones with a high potential of cultural and physical patrimony may result in irreversible damages. Therefore, it is necessary to develop a specific strategy in order to prevent during the construction phase these types of impacts.

III. SOCIAL AND ENVIRONMENTAL ASSESSMENT

The Project only aims at rehabilitating and improving existing departmental road segments. No significant social or environmental impacts are therefore expected that could put at risk, in a direct or indirect manner, the natural environment or the population located in the areas where the project will intervene. As a result, the project has been categorized "B" according to the World Bank operational procedure [OP 4.01].

This categorization is justified by the fact that the works envisaged within the project will not cause significant environmental impacts and that prevention, mitigation and/or compensation measures can be easily identified and implemented with an adequate social and environmental management during the various phases of a subproject's cycle. It should be noted that the main social and environmental impacts that have been observed in the past when the roads were built resulted in fact in an improvement of the social and environmental conditions (such as through the recuperation of environmental liabilities).

The Bank's environmental evaluation has been focusing on five main areas: a) revision of the Bank safeguards policies applicable to the project; b) preparation of a conceptual framework for the project's social and environmental management; c) social and environmental evaluation of the first sets of subprojects; d) preparation of the strategic environmental evaluation for the sub-sector of departmental roads; and e) compliance with the national legislation.

a) Bank Safeguards Policies Applicable to the Project

Environmental Evaluation Policy [OP 4.01]:

Regarding environmental issues, the Bank's Environmental Evaluation Policy is applicable although no significant environmental impact is expected. It is therefore necessary to develop the environmental management procedures needed to ensure the social and environmental sustainability of the sub-projects.

In order to ensure the application of this policy, it was agreed with the QAT that a conceptual framework for the project's social and environmental management will need to be elaborated, along with the environmental evaluation of the first set of rehabilitation works and a strategic environmental evaluation for the departmental roads' sub-sector. In addition, as part of the Conceptual Framework, a training plan will be developed in order to strengthen the institutional capacity of the various actors involved in the social and environmental aspects of project implementation.

Involuntary Resettlement Policy [OP 4.12]:

The works for rehabilitation and maintenance of roads, which will be implemented within the project, are not expected to trigger this policy. However, in order to be prepared in case the policy is triggered by any subproject Resettlement Framework has been prepared by the borrower that depicts the legal framework and the process and principles for the design and implementation of resettlement plans. .

Indigenous Peoples Policy [OD 4.12]:

Peru has a large population of indigenous peoples (around 30 percent of the total population) dispersed over its whole territory, but particularly located in the upper areas of the highlands or sierra and the Amazon basin. To prevent potential impacts and to ensure adequate participation in benefits, the borrower has prepared an Indigenous Peoples development framework. The framework provides information on the Indigenous Peoples of the country, discuss issues related to their participation in subprojects and describe the principles and the process for the design and implementation of Indigenous Peoples development plans in case the policy is triggered..

b) Conceptual Framework for the Project's Socio-environmental Management

In order to ensure an adequate socio-environmental management during project implementation and to comply both with the Peruvian national legislation and the Bank's Safeguards' Policies, it was agreed with PVD that a conceptual framework for the social and environmental management (MCMAS [40] in Spanish) would be developed.

This framework will allow to define on the basis of a legal and institutional diagnostic, the social and environmental procedures both regarding internal and external management, the instruments that are necessary to ensure the inclusion of socio-environmental variables in project cycle, and the preparation of a institutional strengthening plan for social and environmental management. Among others, the specific objectives of this instrument include:

- Proposing an instrument capable of quickly identifying the social and environmental aspects related to each individual project, and detecting the environmental risks;
- Including social and environmental evaluation procedures from the very beginning of project cycle.

[40] *Marco Conceptual para el Manejo Ambiental y Social.*

- Identifying the social and environmental risks, and on that basis, highlight the content of the studies that should be performed, in order to comply with the national legislation and the Bank's safeguards' policies;
- Including in procurement documents mitigation, prevention and/or compensation measures needed to address the social and environmental impacts;
- Proposing processes that comply with the requirements of the environmental authorities, the existing norms and the Bank's safeguards' policies;
- Identifying people responsible for social and environmental management during each of the various project phases
- Proposing procedures that strengthen the institutional capacity to address social and environmental issues.

This conceptual framework has been designed for the internal use of the environmental units of the regional governments, PVD and DGASA, with the purpose of facilitating the inclusion of social and environmental variables in the activities the institution is planning to contract.

Regarding the content itself of the instrument, the document includes a legal and institutional diagnostic of social and environmental issues, as a model for future interventions. Then, taking into account the conclusions from this diagnostic, the framework describes the procedures of social and environmental evaluation and monitoring, as well as the instruments that the institution will have to develop during each of the phases of the project cycle. Regarding these procedures, the document proposes a methodology for the social and environmental categorization, the studies required depending on each category, criteria to evaluate compliance with the environmental legislation and issues related to the monitoring and supervision of subprojects. In addition, the document also presents issues related to the internal processes and the institutional responsibilities, taking into account the project cycle, in order to ensure an adequate social and environmental management.

It should be noted that this instrument must be sufficiently flexible in order to be able to adapt to the work necessities of PVD, with the ultimate objective of improving the quality of projects and of facilitating the processes of promotion of an operation.

c) Strategic Environmental Assessment for the Sub-sector of Department Roads

One of the Bank requirements as part of project preparation was to develop a strategic environmental assessment for the sub-sector of department roads, with the objective of revising policies, plans and programs, and of defining on that basis a social and environmental strategy for the sub-sector. The consultancy for the elaboration of this evaluation was initiated during the month of April 2005 and should be finalized in August 2005.

d) Environmental Evaluation of the First Package of Sub-projects

As part of project preparation and appraisal, the first set of rehabilitation subprojects for the first year of implementation has been reviewed. This set includes 8 regional road segments. It is worth noting that the initial selection of these 8 road segments has been performed by PVD in a

participatory manner (in close coordination with the regional governments and the communities involved). The 8 initial road segments to be rehabilitated under the program are:

Table: Road Segments Prioritized by PVD and for which Feasibility and Design Studies have been Prepared or are On-going.

Depart.	Road segment	Length (Km.)			Type of rehabilitation
		Total	Feasibility studies	Design studies	
Junín	Emp. R3S (Huancayo)-Acopalca-Pariahuanca	94.74	94.74		
	Tramo:Palian-Vilcacoto-Acopalca-Abra Huaytapallana			28.30	Gravel
Pasco	Pasco – Yanahuanca.	64.00			
	Tramo: Pasco - Tambopampa			33.00	Gravel
Ica	Chincha - Huanchos	67.00	67.00		
	Tramo: Chincha – Puente San Juan			26.20	Gravel
Cajamarca	Chilete-Contumazá-Cascas.	96.26	96.26		
	Tramo: Chilete - Contumazá			42.00	Gravel
Piura	Sajinos-Ayabaca-Socchabamba.	86.70	86.70		
	Tramo: Paimas - Ayabaca			53.40	Gravel
Cuzco	Huambutío – Paucartambo.	77.10	77.10		
	Tramo: Huambutío - Huancarani			28.00	Gravel
San Martín	Sacanche-Saposoa.	21.74			
	Tramo: Sacanche - Saposoa			21.74	Gravel
Ayacucho	Cangallo – Huancapi.	24.10			
	Tramo: Cangallo - Huancapi			24.10	Gravel

Source: Provias Departamental (PVD).

In order to perform the social and environmental evaluation of the first set of subprojects, the format of the quick social and environmental evaluation of road projects has been used (Checklist). This format was developed as part of the preparation of the social and environmental management conceptual framework and it takes into account the guidelines of the QAT. Through a quick analysis of a particular project, this assessment allows to determine the social and environmental risk level and to identify the requirements for studies (environmental or social) which have to be prepared before the physical works start.

The preparation of these quick assessments for the first set of activities was performed by PVD, with the support of the DGASA. The results from these assessments were validated by the two banks, during field visits which took place as part of project preparation.

The environmental evaluation allowed to determine that 4 sub-projects have a moderate social and environmental risk (level 2), according to the classification elaborated in the Conceptual Framework for Social and Environmental Management. In addition, 4 sub-projects have a low social and environmental risk (level 1).

Table: Results of the Quick Risk Level Assessment for the First Set of Sub-projects.

Sub-projects		Risk level
N°	Description	
1	Carretera Emp. R1S Chincha - Huanchos	Level 1
2	Carretera Huancayo – Acopalca - Pariahuanca	Level 1
3	Carretera Cerro de Pasco - Yanahuanca	Level 2
4	Carretera Huambutío - Paucartambo	Level 1
5	Carretera Chilete – Contumazá – Cascas – Puente Ochape	Level 2
6	Carretera Cangallo Huancapi	Level 2
7	Carretera Sajinos - Ayabaca	Level 1
8	Carretera Sacanche - Saposoa	Level 2

Based on the level of social and environmental risk for each one of the sub-projects, the requirements in terms of due diligence have been determined, in order to ensure the environmental and social sustainability of the projects, and their compliance with both the national legislation and the Bank safeguards' policies. It is worth noting that these studies are part of the standard technical studies which are required during the various phases of the project cycle.

More precisely, for the sub-projects whose environmental risk has been categorized as 1 (low risk), an environmental impact declaration (DIA in Spanish) has to be performed, while for the category 2 projects (moderate risk) a semi-detailed environmental impact assessment (EIA-sd in Spanish) has to be prepared. No category 3 project (high risk) has been identified.

Table: Due Diligence Requirements Based on the Social and Environmental Risk.

Sub-projects		Risk level	Due diligence requirements
N°	Description		
1	Carretera Emp. R1S Chincha - Huanchos	Level 1	DIA
2	Carretera Huancayo – Acopalca - Pariahuanca	Level 1	DIA
3	Carretera Cerro de Pasco - Yanahuanca	Level 2	EIA-sd
4	Carretera Huambutío - Paucartambo	Level 1	DIA
5	Carretera Chilete – Contumazá – Cascas – Puente Ochape	Level 2	EIA-sd
6	Carretera Cangallo - Huancapi	Level 2	EIA-sd
7	Carretera Sajinos - Ayabaca	Level 1	DIA
8	Carretera Sacanche - Saposoa	Level 2	EIA-sd

Resulting from this assessment, the budget required for the prevention, mitigation and compensation of the social and environmental risks for the first set of sub-projects has been estimated to **US$ 380.742**, about **3,01%** of the total amount for the first set of activities US$ 12.616.480.

In this context, once revised the quick social and environmental assessments and performed the respective field visits as part of the appraisal process from the two banks, it was concluded that

the initial sample of projects identified for the first year of operation of the program, is acceptable from the social and environmental point of view.

It is worth noting that all project activities involve the rehabilitation or maintenance of existing roads and that no new constructions are planned. Nevertheless, particular attention should be paid to the direct impacts of these activities, so that adequate prevention, mitigation and/or compensation measures can be ensured. The main impacts for this type of projects will be temporary during the execution of activities.

f) Compliance with the environmental legislation.

PVD has initiated the respective environmental evaluations in the initial phases of design and pre-feasibility, with the ultimate objective of complying with the requirements of the competent environmental authority (in this case the DGASA of MTC).

The elaboration of the Conceptual Framework for the Project's Social and Environmental Management has been performed in close partnership with the DGASA in order to verify its compliance with the national legislation and to review the instruments developed for each social and environmental risk category.

This exercise has been very positive since it will allow complying with the environmental legislation in an agile and efficient manner, thus contributing to Peru's social and environmental management.

IV. ENVIRONMENTAL BUDGET

The project's environmental budget is divided in three components: the investments required mitigating the environmental impact of subprojects and the investments required to strengthen the institutional capacity of the regional governments, PVD and the DGASA.

The amount estimated for the environmental management is **US$ 500.742**, of which US$ 380.742 are include in amount of projects for the prevention, mitigation and compensation of environmental impacts and US$ 120.000 for the implementation of the institutional strengthening plan.

The amount assigned for environmental issues represents 3,96% of the total amount assigned for the first set of sub-projects.

Table: Environmental Budget

Activities	Amount US$
- Prevention, mitigation and compensation of environmental impact (first set of sub-projects)	380.742
- Institutional strengthening plan for environmental management	120.000
Total	**500.742**

V. SOCIAL AND ENVIRONMENTAL SUSTAINABILITY

Once finalized the project's social and environmental evaluation, and taking into account that a number of measures aiming at including the social and environmental dimension in an integrated fashion in project's design has been developed during project preparation, it was concluded that the project is acceptable from an environmental point of view and that it complies with the Bank's safeguards policies.

Finally, a permanent monitoring and evaluation system must be developed to evaluate the actual implementation of the measures identified during project appraisal, with the ultimate objective of ensuring its successful implementation, including from the social and environmental point of view.

Annex 11: Project Preparation and Supervision

PERU: Regional Transport Decentralization

	Planned	Actual
PCN review	14 April 2004	14 April 2004
Initial PID to PIC	15 April 2004	15 April 2004
Initial ISDS to PIC	15 April 2004	15 April 2004
Appraisal	25 April 2005	
Negotiations	9 May 2005	
Board/RVP approval	28 June 2005	
Planned date of effectiveness	1 December 2005	
Planned date of mid-term review	30 June 2007	
Planned closing date	30 June 2010	

Key institutions responsible for preparation of the project:

- *Provias Departamental* / Ministry of Transport and Communications
- Ministry of Finance
- Multi-sector Commission for the Preparation of the Regional Transport Decentralization Project

Bank staff and consultants who worked on the project included:

Name	Title	Unit
Aurelio Menendez	Lead Transport Specialist (co-Team Lead)	LCSFT/EASTR
Nicolas Peltier-Thiberge	Infrastructure Economist (co-Team Lead)	LCSFT
Maria Emilia Freire	Regional Advisor	LCSFP
Juan Quintero	Senior Environmental Specialist	LCSEN
Alonso Zarzar	Senior Social Scientist	LCSEO
Patricia Mc Kenzie	Senior Financial Management Specialist	LCOAA
Keisgner Alfaro	Senior Procurement Specialist	LCOPR
Isabella Micali-Drossos	Senior Council	LEGLA
Xiomara Morel	Senior Finance Officer	LOAG3/LOAG1
Joseph Paul Formoso	Lead Finance Officer	LOAG1
Sally Burningham	Senior Transport Specialist (peer reviewer)	SASEI
Fernando Rojas	Lead Public Sector Management Specialist (peer reviewer)	LCSPS
Mohammed Feghoul	Lead Municipal Engineer (peer reviewer)	MNSIF
Kathrin Plangemann	Senior Public Sector Specialist (peer reviewer)	LCSPS
Nicolas Drossos	Consultant	LCOAA

Bank funds expended to date on project preparation:

1. Bank resources: US$244,962.27
2. Trust funds: US$410,000 (PHRD Grant JPN 53335)
3. Total: US$654,862.27

Estimated Approval and Supervision costs:

1. Remaining costs to approval: US$35,000
2. Estimated annual supervision cost: US$89,000

Annex 12: Documents in the Project File

PERU: Regional Transport Decentralization

Diseño del Modelo de Gestión Vial Departamental Descentralizada del Peru – Ing. Hernán Otoniel Fernández Ordoñez, Lima – July 2004

Programa de Caminos Departamentales – Informe Situacional del Programa a Noviembre del 2003 – Provias Departamental, November 2004.

Manual de Procedimientos para la formulación de los Planes Viales Departamentales Participativos – Provias Departamental, November 2003.

Metodología para la Formulación, Evaluación y Actualización de los Planes Viales Departamentales Participativos – Provias Departamental, September 2003.

Guía e Instructivos para la Formulación de los Planes Viales Departamentales Participativos - Provias Departamental, September 2003.

Marco Teórico para la Planificación Vial Departamental – Provias Departamental, November 2003.

Plan de Evolución Institucional de Provias Departamental en el Contexto del Programa de Caminos Departamentales – PCD – Provias Departamental, June 2005.

Annex 13: Statement of Loans and Credits

PERU: Regional Transport Infrastructure Decentralization

			Original Amount in US$ Millions						Difference between expected and actual disbursements	
Project ID	FY	Purpose	IBRD	IDA	SF	GEF	Cancel.	Undisb.	Orig.	Frm. Rev'd
P078953	2005	PE-(CRL) ACCOUNT. F/ DECENT. SOC.SCTR	7.80	0.00	0.00	0.00	0.00	7.80	0.00	0.00
P088809	2005	PE Inst. Capacity for Decent. TAL	8.80	0.00	0.00	0.00	0.00	8.80	0.00	0.00
P073438	2004	PE Justice Services Improvement	12.00	0.00	0.00	0.00	0.00	12.00	4.60	0.00
P035740	2004	PE LIMA TRANSPORT PROJECT	45.00	0.00	0.00	0.00	0.00	45.00	36.06	0.00
P074021	2004	LIMA TRANSPORT PROJECT	0.00	0.00	0.00	7.93	0.00	7.93	7.84	0.00
P068250	2003	GEF PE PARTICIPATORY MGMT PROT AREAS	0.00	0.00	0.00	14.80	0.00	11.43	2.14	0.00
P077788	2003	PE Trade Facil. and Prod. Improv. T. A.	20.00	0.00	0.00	0.00	0.00	19.80	6.13	0.00
P081834	2003	Lima Water Rehab Add'l Financing	20.00	0.00	0.00	0.00	0.00	20.00	5.13	0.00
P055232	2003	PE- Rural Education	52.50	0.00	0.00	0.00	0.00	50.13	3.13	0.00
P065256	2003	PE NATIONAL RURAL WATER SUPPLY AND	50.00	0.00	0.00	0.00	0.00	48.41	11.91	0.00
P044601	2001	PE SECOND RURAL ROADS PROJECT	50.00	0.00	0.00	0.00	0.00	23.58	8.68	0.00
P065200	2001	GEF PE Indigenous Management Prot. Areas	0.00	0.00	0.00	10.00	0.00	7.36	1.70	0.00
P047690	2000	PE RES. & EXTENSION	9.60	0.00	0.00	0.00	0.00	1.58	-8.02	1.58
P062932	2000	PE-HEALTH REFORM PROGRAM	80.00	0.00	0.00	0.00	0.00	15.73	-11.27	-11.27
		Total:	355.70	0.00	0.00	32.73	0.00	279.55	68.03	- 9.69

		Committed				Disbursed			
		IFC				IFC			
FY Approval	Company	Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
2000	Agrokasa	4.20	0.00	0.00	0.00	4.20	0.00	0.00	0.00
1999	Alicorp	14.67	0.00	20.00	8.57	14.67	0.00	20.00	8.57
2004	EDYFICAR	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	FTSA	7.50	0.00	1.50	0.00	7.50	0.00	1.50	0.00
2003	Global MEF	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00
2002	Gloria	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002/03	ISA Peru, SA	0.20	0.00	0.00	0.00	0.12	0.00	0.00	0.00
2001	Inka Terra	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
2004	Interbank-Peru	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002/03	Interseguro	0.00	0.59	0.00	0.00	0.00	0.59	0.00	0.00
2000	Laredo	7.14	0.00	5.00	0.00	7.14	0.00	5.00	0.00
2002	MIBANCO	1.67	0.00	0.00	0.00	1.67	0.00	0.00	0.00
1999	Milkito	5.50	0.00	3.50	0.00	3.50	0.00	3.50	0.00
2003	Norvial S.A.	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1998	Paramonga	13.01	0.00	0.00	10.98	13.01	0.00	0.00	10.98
2001	Peru OEH	9.70	0.00	0.00	0.00	5.70	0.00	0.00	0.00
1994	Peru Prvtzn Fund	0.00	7.90	0.00	0.00	0.00	7.90	0.00	0.00
1993/96/00/01	Quellaveco	0.00	0.75	0.00	0.00	0.00	0.72	0.00	0.00
1999	RANSA	6.88	0.00	0.00	0.00	6.88	0.00	0.00	0.00
2003	TIM Peru	70.00	0.00	0.00	0.00	70.00	0.00	0.00	0.00
2001	Tecnofil S.A.	4.95	2.00	0.00	0.00	4.95	2.00	0.00	0.00
2001	UPC	6.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00
1993/99	Yanacocha	20.00	0.00	0.00	25.00	10.00	0.00	0.00	25.00
	Total portfolio:	262.42	11.24	34.00	44.55	160.34	11.21	30.00	44.55

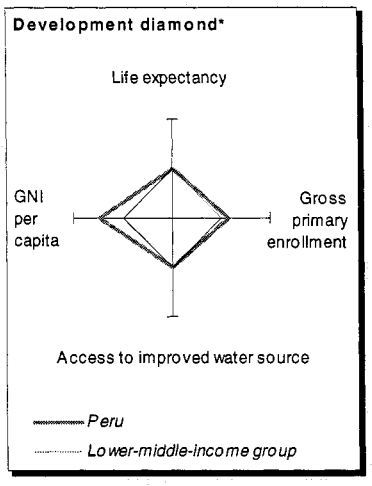
PERU
STATEMENT OF IFC's
Held and Disbursed Portfolio
In Millions of US Dollars

		Approvals Pending Commitment			
FY Approval	Company	Loan	Equity	Quasi	Partic.
2004	CMAC Arequipa	0.01	0.00	0.00	0.00
2004	EDYFICAR	0.00	0.00	0.00	0.00
2002	Inka Terra Swap	0.00	0.00	0.00	0.00
2004	UPC II	0.00	0.00	0.00	0.00
	Total pending commitment:	0.01	0.00	0.00	0.00

Annex 14: Country at a Glance

PERU: Regional Transport Infrastructure Decentralization

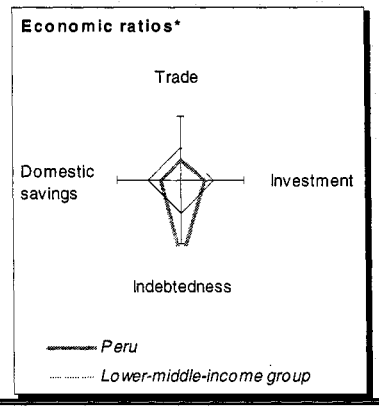
POVERTY and SOCIAL	Peru	Latin America & Carib.	Lower-middle-income
2002			
Population, mid-year *(millions)*	26.7	527	2,411
GNI per capita *(Atlas method, US$)*	2,060	3,280	1,390
GNI *(Atlas method, US$ billions)*	55.1	1,727	3,352
Average annual growth, 1996-02			
Population *(%)*	1.6	1.5	1.0
Labor force *(%)*	2.8	2.2	1.2
Most recent estimate (latest year available, 1996-02)			
Poverty *(% of population below national poverty line)*	49	..	..
Urban population *(% of total population)*	73	76	49
Life expectancy at birth *(years)*	70	71	69
Infant mortality *(per 1,000 live births)*	30	27	30
Child malnutrition *(% of children under 5)*	7	9	11
Access to an improved water source *(% of population)*	80	86	81
Illiteracy *(% of population age 15+)*	9	11	13
Gross primary enrollment *(% of school-age population)*	128	130	111
Male	128	131	111
Female	127	128	110



KEY ECONOMIC RATIOS and LONG-TERM TRENDS

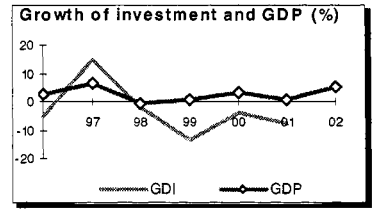
	1982	1992	2001	2002
GDP *(US$ billions)*	24.8	36.1	54.2	56.9
Gross domestic investment/GDP	33.6	17.3	18.3	..
Exports of goods and services/GDP	16.5	12.5	15.8	..
Gross domestic savings/GDP	30.5	14.4	16.9	..
Gross national savings/GDP	26.4	12.4	16.5	..
Current account balance/GDP	-6.5	-5.2	-2.0	..
Interest payments/GDP	2.4	0.9	2.1	2.2
Total debt/GDP	43.2	56.4	51.0	49.0
Total debt service/exports	48.6	20.3	22.0	28.7
Present value of debt/GDP	..	..	51.9	..
Present value of debt/exports	..	..	282.7	..

	1982-92	1992-02	2001	2002	2002-06
(average annual growth)					
GDP	-0.8	4.0	0.6	5.2	4.0
GDP per capita	-2.9	2.2	-1.0	3.7	2.4

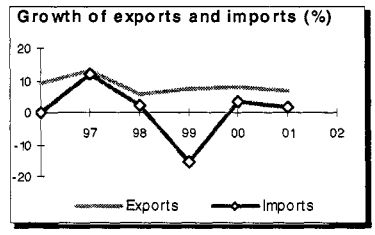


STRUCTURE of the ECONOMY

	1982	1992	2001	2002
(% of GDP)				
Agriculture	10.2	8.5	8.5	..
Industry	42.0	27.9	29.7	..
Manufacturing	36.2	17.7	15.3	..
Services	47.8	63.6	61.7	..
Private consumption	58.4	77.7	72.0	..
General government consumption	11.0	7.9	11.1	..
Imports of goods and services	19.5	15.5	17.2	..

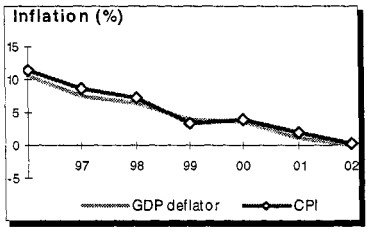


	1982-92	1992-02	2001	2002
(average annual growth)				
Agriculture	1.7	6.4	-0.6	..
Industry	-0.1	4.8	0.7	..
Manufacturing	-0.3	3.4	-1.1	..
Services	-1.5	3.7	0.1	..
Private consumption	-0.5	3.7	1.3	..
General government consumption	-2.1	5.1	-0.5	..
Gross domestic investment	-1.1	4.2	-8.0	..
Imports of goods and services	0.0	6.1	1.6	..



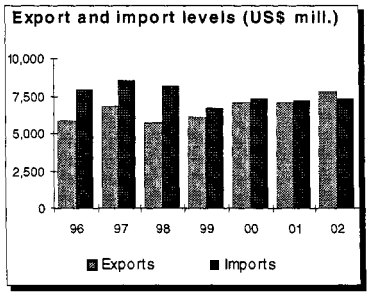
PRICES and GOVERNMENT FINANCE

	1982	1992	2001	2002
Domestic prices				
(% change)				
Consumer prices	64.8	73.5	2.0	0.4
Implicit GDP deflator	65.2	69.2	1.2	0.0
Government finance				
(% of GDP, includes current grants)				
Current revenue	..	13.5	14.1	13.7
Current budget balance	..	-0.8	-0.6	-0.5
Overall surplus/deficit	..	-3.9	-2.8	-2.3



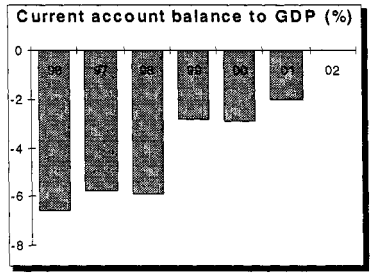
TRADE

	1982	1992	2001	2002
(US$ millions)				
Total exports (fob)	..	3,661	7,108	7,751
Copper	..	756	987	1,110
Fishmeal	..	427	835	939
Manufactures	..	966	2,181	2,209
Total imports (cif)	..	4,001	7,198	7,374
Food	..	480	530	543
Fuel and energy	..	396	907	929
Capital goods	..	1,063	1,911	1,962
Export price index *(1995=100)*	..	85	79	80
Import price index *(1995=100)*	..	89	98	99
Terms of trade *(1995=100)*	..	96	80	81



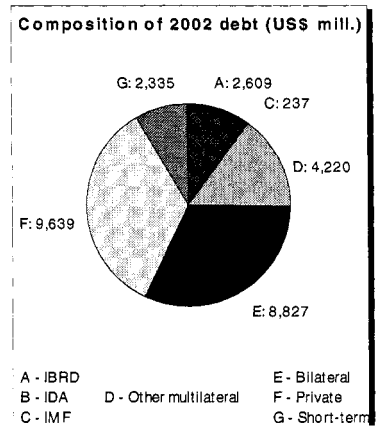
BALANCE of PAYMENTS

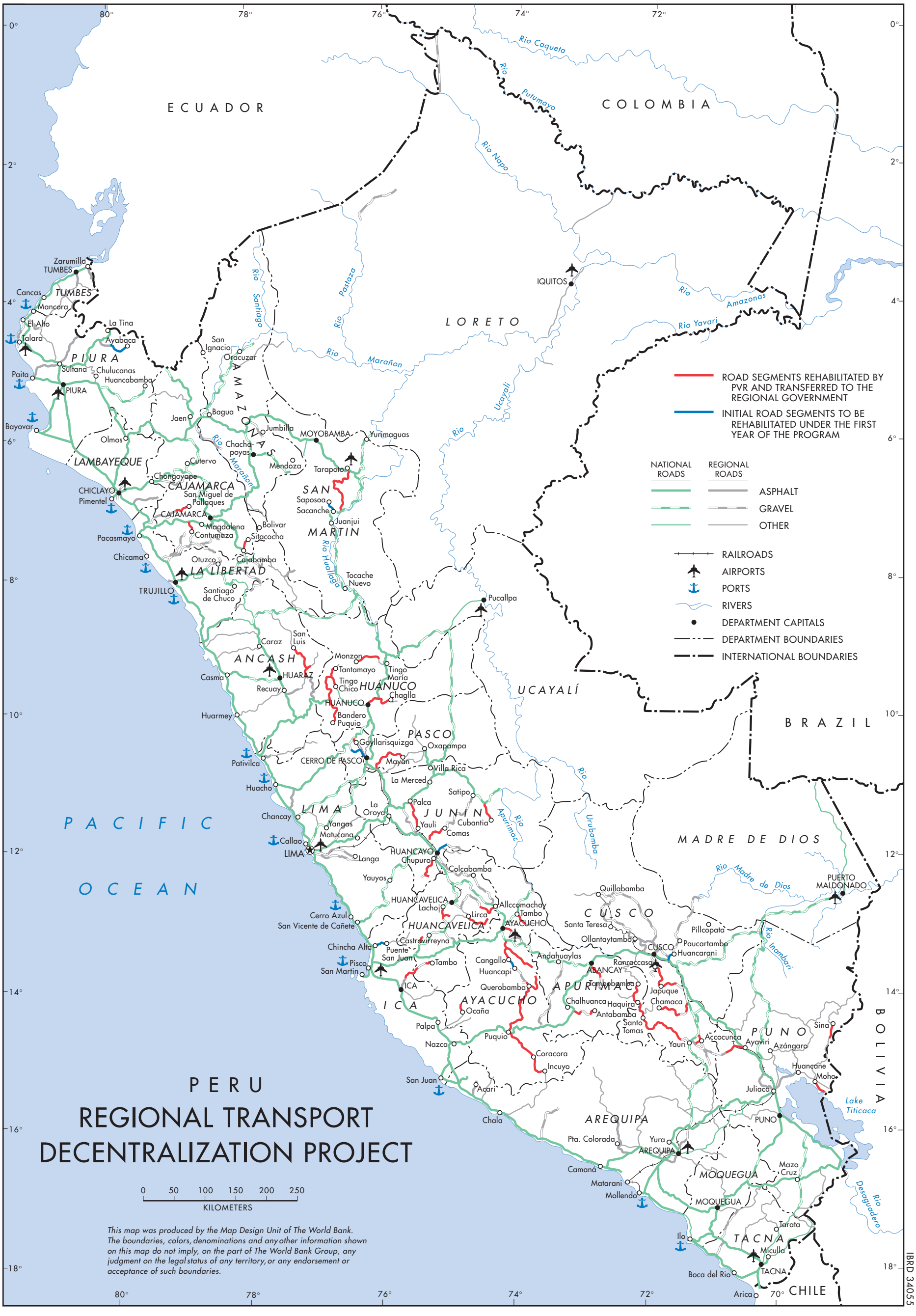
	1982	1992	2001	2002
(US$ millions)				
Exports of goods and services	4,077	4,497	8,597	9,308
Imports of goods and services	4,436	5,412	9,487	9,819
Resource balance	-359	-915	-890	-512
Net income	-989	-1,635	-1,203	-1,506
Net current transfers	0	460	999	907
Current account balance	-1,609	-1,886	-1,098	..
Financing items (net)	1,525	2,455	1,546	..
Changes in net reserves	84	-569	-448	-340
Memo:				
Reserves including gold *(US$ millions)*	..	3,365	8,930	9,102
Conversion rate *(DEC, local/US$)*	6.98E-7	1.2	3.5	3.5



EXTERNAL DEBT and RESOURCE FLOWS

	1982	1992	2001	2002
(US$ millions)				
Total debt outstanding and disbursed	10,709	20,343	27,645	27,867
IBRD	478	956	2,626	2,609
IDA	0	0	0	0
Total debt service	2,036	1,004	2,190	2,755
IBRD	56	194	300	304
IDA	0	0	0	0
Composition of net resource flows				
Official grants	53	238	201	..
Official creditors	150	306	744	297
Private creditors	1,178	-97	294	1,436
Foreign direct investment	48	-79	1,064	..
Portfolio equity	0	0	42	..
World Bank program				
Commitments	378	1,150	230	100
Disbursements	85	0	149	146
Principal repayments	22	94	114	163





PERU
REGIONAL TRANSPORT DECENTRALIZATION PROJECT

0 50 100 150 200 250
KILOMETERS

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