WEST BANK AND GAZA

TRANSPORT SECTOR STRATEGY NOTE

(FINAL)

October 30, 2007

Sustainable Development Department
Middle East and North Africa Region

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CURRENCY AND EQUIVALENT UNITS

(As of April 2007)
Currency Unit = Israeli New Shekel (NIS)

<table>
<thead>
<tr>
<th>US$ 1.0</th>
<th>= NIS 4.10</th>
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<td>= US$ 0.24</td>
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ABBREVIATIONS

ADF African Development Fund
AMA Agreement on Movement and Access
BADEA Arab Bank for Economic Development in Africa
CAA Civil Aviation Authority
EIB European Investment Bank
GACB General Administration of Crossings and Borders
GIA Gaza International Airport
GOI Government of Israel
ICAO International Civil Aviation Organization
IDB Islamic Development Bank
IDF Israeli Defense Forces
JTO Joint Transport Office
MOA Ministry of Agriculture
MOF Ministry of Finance
MOLG Ministry of Local Government
MOP Ministry of Planning
MOT Ministry of Transport
MPWH Ministry of Public Works and Housing
MTDP Medium Term Development Plan
OCHA Office of the Coordinator of the Humanitarian Affairs
PA Palestinian Authority
PAL Palestinian Airlines
PCBS Palestinian Central Bureau of Statistics
PECDAR Palestinian Economic Council for Development and Reconstruction
PLC Palestinian Legislative Council
TA Technical Assistance
TFPI Task Force on Project Implementation
TSN Transport Sector Strategy Note
UNRWA United Nations Relief and Works Agency
WBG West Bank and Gaza

FISCAL YEAR (FY)

January 1 - December 31

<table>
<thead>
<tr>
<th>Vice President</th>
<th>Daniela Gressani</th>
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<tr>
<td>Country Director</td>
<td>A. David Craig</td>
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<tr>
<td>Sector Director</td>
<td>Inger Andersen</td>
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<td>Sector Manager</td>
<td>Hedi Larbi</td>
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<td>Task Team Leader</td>
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Executive Summary

Purpose
The main purpose of this Transport Sector Strategy Note (TSN) is to assist the Palestinian Authority (PA) to address some of the urgent constraints on sector development, and thus support of the PA’s effort to revive the national economy, improve mobility and reduce poverty. The TSN also aims to assist the responsible sector ministries prepare a coherent framework and supporting program for the sector. A third set of objectives is to update the Bank’s knowledge of the transport sector priorities in light of recent developments, and to identify high priority interventions for possible consideration by the donor community.1

Background
The current operating context is one of deep economic, social and political crisis; severe shortage of funds to meet even basic needs; and weak and increasingly weakening institutional capacity. This severely limits the room for major new policy, program and project initiatives.

The 1993 Oslo Agreement significantly limited Palestinian Authority (PA) control of major sections of the West Bank and Gaza (WBG) and the transportation network. Palestinians were given some autonomy in the main urban centers (area “A”) but had to share decision making with Israel on activities in the peri-urban areas (area “B”). They have no real jurisdiction in the inter-urban areas, i.e., in perhaps 60 percent of the WBG. Thus, Palestinian decision making with respect to transport system development and maintenance is very highly circumscribed. They have to seek Israeli permission to make improvements in the peri-urban areas, and they have no say whatsoever on the status or development of the major inter-urban networks. Hence, the have almost no control over national transport development strategy or policymaking.

In addition, the Israeli closure regime on WBG, which has increased in its restrictiveness since the mid-nineties, significantly limited the movement of people and goods, and ultimately the welfare of Palestinians. The regime which began by restricting movements from West Bank and Gaza (WBG) into Israel and from West Bank into Gaza, and visa-versa, was greatly intensified following the outbreak of the 2nd Intifada in September 2000 to include extremely strict system of internal closures within West Bank and within Gaza. This severely limited the movement of people and goods within the West Bank and Gaza, with devastating effects on the Palestinian society, economy and institutions. Further, for all practical purposes, the PA lost the limited control it had over area “B”. An already extremely deep crisis became even graver with the election of the Hamas political party to government in early March 2006. Israel has since withheld Palestinian revenues it collects on behalf of the PA, and donors have drastically reduced their financial support, especially for infrastructure development projects. Donor assistance to the transport sector since

1 The TSN should also be useful to the PA in its discussions with Israel.
1994 has been estimated at US$337 million. This has brought public sector programs and activities to a virtual halt.

Current Political Context

As this report is presented to the PA for review and comments, the already fluid political context in WBG has become even more uncertain and complex. While the implementation of development plans and investment programs in WBG is subject to external factors such as the progress, or lack thereof, in the peace process and the Palestinian leadership’s relationship with the international community, it is also subject to internal Palestinian politics. This is particular to the yet unfolding political developments including the recent dismissal of the Hamas-led government and the announcement of an emergency government, as well as the current lack of clarity and stability in the Gaza Strip. This is also in respect to the recent announcements by the international community to resume its relations with and financial support to the new emergency government. The uncertainty as to how the PA will function in the West Bank and Gaza under these circumstances is still unclear. As a result, the assessment, assumptions and implementation of proposed institutional development and investment program made in this report will likely need to be reviewed and revised once there is greater clarity in the political context.

Key Issues in the Transport Sector

Several key factors are currently constraining the transport sector. These can be grouped in the following four categories: 1) Physical: network characteristics and status; 2) Institutional: roles and responsibilities for network and systems development and management; 3) Accessibility and Connectivity: convenience and cost of network access; and 4) Public Transport and Safety (a subsidiary category).

1. Physical

*The already limited existing road network capital under PA control is being destroyed.*

Road transport is by far the most important mode in WBG. The overall network is relatively well developed by regional standards. However, recent estimates by the Ministry of Public Works and Housing (MPWH) indicate that almost 50 percent of the road network, under PA’s control, is in poor, very poor or failed condition, and hence beyond economic repair. This has been caused by an under-funding of regular maintenance over many years as well as damage caused by the Israeli military incursions since the 2nd Intifada.\(^2\)

2. Institutional

*Responsibility for the sector is unclear.*

Even within the confines of Palestinian control over the transport sector, physically defined within Area A and B, there are at least 3 claimants -- the Ministry of Transport (MOT), the

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\(^2\) Air and sea modes were severely damaged and/or circumscribed by the Israelis in response to the Intifada. A very old rail system exists but it is completely non-functional.
Ministry of Public Works and Housing (MPWH), and Palestinian Economic Council for Reconstruction and Development (PECDAR) -- and none seems willing to yield pride of place to the other. This greatly weakens policymaking, planning, management and development in the sector.

*The PA’s capacity for sector management is weak.*

Considerable progress had been made in building capacity -- including capacity in key sector agencies -- up to 2000. Even then, policymaking and program management capacity remained relatively weak by modern standards. This modest capacity has now been severely eroded by the breakdown of governmental institutions under the pressure of financial and higher-level political disarray. With the non-payment (or irregular partial payment) of civil servants since early 2006, key agencies ceased to function effectively, and some highly qualified staff have left for predictable and rewarding pastures elsewhere.

3. **Accessibility and Connectivity**

*The PA has limited control and access to most of the road network used within the West Bank.*

As noted above, the PA has control on only that part of the network that it is within Area A and B while the rest of the network remains under Israeli jurisdiction or control therefore limiting the scope of PA actions in implementing transport plans or improvements.

*The existing Israeli internal and external closure regime together with the “Separation Barrier” severely constrains economic and social development in the West Bank.*

An earlier published Bank’s technical paper reflected on the closure policy as follows: “The policy of closure, which broadly consists of comprehensive restrictions on the movement of people and goods within the West Bank, highly constricted movement of goods across the border with Israel, and a near total separation of economic and social interaction between the territories of Gaza and the West Bank, has resulted in a highly fragmented Palestinian economy. In economic terms, the restrictions arising from closure have not only increased transaction costs, but have also led to a level of uncertainty and inefficiency which has made the conduct of business difficult and therefore has stymied the growth and investment which is necessary to fuel economic revival.”

*The existing Israeli external closure regime virtually eliminates the possibility of economic and social development in Gaza.*

The current practically complete closure on Gaza, through the limited control on the Gaza – Egypt border and no control on that with Israel, the 1.5 million Palestinians in Gaza are effectively cut-off from the outside world, the markets and employment opportunities in Israel, the West Bank or regional and international markets.

4. **Public Transport and Road Safety**

*Public transport management and regulation is in disarray.*

Public transport in WBG is performing largely by privately owned buses, shared taxis and taxis. The supply has been regulated by a traditional system with roots many years back in

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3 The *Separation Barrier* is currently being constructed by the GOI for security reasons. The route of this Barrier significantly departs from the 1967 Armistice Line and cuts into the territory of the West Bank.

4 Movement and Access Restriction in the West Bank and Gaza: Uncertainty and Inefficiency in the Palestinian Economy, World Bank Technical Team, May 9, 2007
history. However, the regulatory system which previously functioned reasonably well is now inefficient and outdated. Enforcement mechanisms have also been broken down - a victim of the post 2nd Intifada crisis. As a result, illegal taxis proliferate in the urban and peri-urban areas, with little regard for public safety or basic road etiquette.

Road traffic safety record is poor.

The fatality rate in WBG is about 10 times that in Western Europe. This is partly a consequence of the relatively poor condition of the road network, lack of traffic regulations and the breakdown of enforcement mechanisms noted above.

Towards a Strategic Framework and a Program

Any realistic and practicable framework must take cognizance of the character and state of the existing networks and systems, the objectives and capacity of the key actors and institutions, the current political, economic, and fiscal situation in the WBG, as well as the PA’s broader aims and objectives. It must also take cognizance of the constraints imposed by Israel and the views of donors who now provide almost all the developmental funds. Within this broad framework, the proposed strategy would be:

First, to focus on feasible and practical improvements to the transport system that are within the PA’s scope for action and with clear economic payoff in terms of improving access and reducing costs in the short-term;

Second, to rationalize the institutional framework so that roles and responsibilities are clear, rules can be established and enforced, and institutions can be held accountable for performance; and

Third, to lay the foundation for future actions to be undertaken once the necessary prerequisites are in place.

Given the objectives and the context, two program phases have been outlined in this TSN:

- An immediate to short-term program focusing on specific practical and visible improvements that can be implemented within the PA’s current scope for action with respect to some of the main issues of the transport sector to ease the people suffering and reduce travel cost and time;

- A medium to longer -term program aimed more at development and reactivation of major transport assets and which would require that movement and access restrictions be significantly alleviated to an extent that assures revival of economic activity, PA and GOI cooperation resumed and active on transport issues, and the sanctions against the PA lifted.

The proposed Program rests on two “pillars”: Priority Infrastructure Investments, and Institutional Reform and Capacity Building; and on three themes: Improving Institutional Capacity and Overall Sector Management, Improving Internal Mobility, Improving

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5 This Transport Sector Strategy Note has been prepared in close consultation with the PA. A draft Note, was shared with senior officials of the Ministries of Transport, Planning, Public Works and Housing, and was discussed with them in a stakeholder workshop held in the World Bank office in Jerusalem on May 10th, 2007.
External Connectivity. The latter not only reflect PA needs and priorities, as a practical
matter they are also geared to objectives and preferences of the donor community on whom
program financing critically depends. The key program components are outlined below.

**Short Term Program**

A. **Institutional Pillar:**

- Establish a Cabinet-level Committee to decide on the allocation of roles and
  responsibilities in the sector;
- Establish a national-level Transport Steering Committee (preferably under the joint
  leadership of Ministries of Transport and Public Works) to coordinate the update of
  transport policies, regulations and oversee the implementation of the “Strategic
  Framework”;
- Unify direct road management and maintenance under one ministry (preferably the
  Ministry of Public Works and Housing who already have experience and
  competence in this area);
- Institute a donor coordination mechanism to secure sustainable/coordinated support
  of donors (to be led by the Ministries of Planning and Transportation and would
  include all donors and relevant PA institutions involved in the sector);
- Upgrade the current institutional capacity of MPWH and MOT (cadre of competent
  staff – training – processes/procedures to properly manage challenges facing the
  sector).

B. **Investments Pillar:**

- High priority road rehabilitation and maintenance in the PA controlled areas (to
  reduce travel time and cost, as well as accidents);
- Rural roads (priorities program) to improve accessibility and connectivity, as well
  as to provide temporary employment opportunities;

**Medium to Longer Term Program:**

A. **Investments Pillar:**

- Road Development Plan (priority new investments) in WBG;
- Road Rehabilitation and maintenance in the PA controlled areas (Continued);
- Territorial Link between West Bank & Gaza; and trade corridors between West
  Bank & Jordan and between Gaza & Egypt;
- Gaza Seaport Construction;
- Gaza International Airport (GIA) Rehabilitation.
- Infrastructure Rehabilitation/Development of Border Crossings.

B. **Institutional Pillar:**

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6 This could also be through the Local Aide Coordination Committee (LACC) sector working group on Infrastructure.
- Preparation of a medium- to long-term development strategy to assist economic development and national integration;
- Adoption and enforcement of updated policies and regulations;
- Development of adequate road financing arrangements (especially for road maintenance).

**Proposed Institutional Development and Investment Program**

The following table summarizes the key programs and estimated costs.

<table>
<thead>
<tr>
<th>No.</th>
<th>Program/Project</th>
<th>Estimated Investment (US$M)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Immediate to Short-Term (two years)</td>
</tr>
<tr>
<td>A.</td>
<td><strong>Improving Institutional Capacity and Overall Sector Management</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Strengthening Capacity for Policy and Planning, and Overall Sector Management (Technical Assistance to MOT)</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>Strengthening Road Network Management (Technical Assistance to MPWH)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-Total</strong></td>
<td>7</td>
</tr>
<tr>
<td>B.</td>
<td><strong>Improving Internal Mobility</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Strengthening Road Traffic and Transport Management (Technical Assistance to MOT)</td>
<td>1</td>
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<tr>
<td>2.</td>
<td>Road Network Rehabilitation and Maintenance(^7)</td>
<td>100</td>
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<td>3.</td>
<td>Road Network Development</td>
<td>2(^8)</td>
</tr>
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<td>4.</td>
<td>The West Bank – Gaza Territorial Link (Technical Assistance)</td>
<td>2</td>
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<tr>
<td></td>
<td><strong>Sub-Total</strong></td>
<td>105</td>
</tr>
<tr>
<td>C.</td>
<td><strong>Improving External Connectivity</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Damage Repair of Gaza International Airport</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Construction of Gaza Seaport</td>
<td>3(^{10})</td>
</tr>
<tr>
<td>3.</td>
<td>Rehabilitation/Development of Border Crossings Infrastructure</td>
<td>2(^{11})</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-Total</strong></td>
<td>5</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td></td>
<td>117</td>
</tr>
</tbody>
</table>

\(^7\) Maintenance costs are included in the annual amount of US$27 million over 5 years.
\(^8\) Development of national road master plan
\(^9\) Rough estimate of construction cost of new roads
\(^10\) Preparation of feasibility study, conceptual designs, detailed designs and tender documents for a deep-sea seaport
\(^11\) Preparation of Needs Assessment, conceptual designs, detailed designs and tender documents
1. Introduction

The predecessor of this Transport Sector Strategy Note (TSN), the Transport Sector Study issued in 2000\(^\text{12}\), reported that:

“Transport development is probably the most difficult issue confronting the future development of the Palestinian economy. With its two parts, the West Bank and Gaza, separated by Israeli territory, with Palestinian “self-rule areas” not contiguous in the West Bank with limited control over transport infrastructure connecting its various part, and with an economy heavily dependent for trade and development on Israel and neighbouring countries, transport development is of central concern to the Palestine Authority (PA).”

Much of the same was stated in the introduction to the Bank’s Infrastructure Assessment issued at in December 2004 and it may be repeated again in this TSN. Yet the situation is in several respects even graver than it was when the earlier reports were drafted, and for well known reasons, primarily, the Israeli closure regime.

The current operating context is one of deep economic, social and political crisis; severe shortage of funds to meet even basic needs; and weak and increasingly weakening institutional capacity. This severely limits the room for major new policy, program and project initiatives.

The 1993 Oslo Agreement, while providing some freedoms to Palestinians, significantly limited their control of major sections of the West Bank and Gaza (WBG) and the transportation network. Palestinians were given some autonomy in main urban centers (area “A”) but had to share decision making with Israel on activities in the peri-urban areas (area “B”), and had no real jurisdiction in the inter-urban areas, i.e., in perhaps 60 percent of the WBG. Thus Palestinian decision making with respect to transport system development and maintenance was very highly circumscribed. They had to seek Israeli permission to make improvements in the peri-urban areas, and they had no say whatsoever on the major inter-urban networks, and hence over national transport development strategy.

In addition, the closure regime has significantly limited the movement of people and goods, and ultimately the welfare of the Palestinians. This regime which initially only restricted movements from West Bank and Gaza (WBG) into Israel and from West Bank into Gaza, and visa-versa, was greatly intensified following the outbreak of the 2nd Intifada in September 2000 to include extremely strict system of internal closures within West Bank and within Gaza. This severely limited the movement of people and goods within the West Bank and Gaza, with devastating effects on the Palestinian society, economy and institutions. Further, for all practical purposes, the PA lost the limited control it had over area “B”. An already extremely deep crisis became even graver with the election of the Hamas political party to government in early March 2006. Israel has since withheld Palestinian revenues it collects on behalf of the PA, and donors have drastically reduced their financial support. This has brought public sector activities and programs to a virtual halt. The intensified restrictions have also lead to a situation where Gaza now is

\(^{12}\) The World Bank: West Bank and Gaza, Transport Sector Study, January 24, 2000
nearly closed off to the rest of the world. In 2006, the unemployment rate was 30 percent and the poverty rate about 35 percent in WBG; while unemployment rate was even higher, about 40 percent in Gaza.\textsuperscript{13}

1.1. The Setting for Transport in the West Bank and Gaza

A quasi land-locked country: The West Bank is bounded by the Jordan River and the Dead Sea from the East and by Israel the other three directions, and has an area of 5,860 km\textsuperscript{2}. Distances are small less than 60 km at the thickest point east to west and about 130 km where the distance north to south is the longest, measured as the crow flies. The Gaza Strip is bounded by the Mediterranean from the west (a coastline of 40 km); by Egypt from the south and by Israel from the north and east. It has an area of about 360 km\textsuperscript{2} and a width of about 9.0 km. The West Bank and the Gaza Strip are separated by about 40 km measured from the northern part of the Gaza Strip to the southern part of the West Bank.

Figure 1: Map of the Main Transport Elements in West Bank and Gaza

Demographic Growth: As of December 2006, the population of the WBG was about four million with a relatively high average annual rate of growth of about 3.8 percent. The projected longer term annual population growth is three percent, with the population likely to double by the year 2020. About two and a half million live in the West Bank, including 0.33 million in East Jerusalem. The population is young. Nearly 48 percent are under the age of 15 years and only seven percent are 55 years or older. The life expectancy is 72.5 years. In addition, about 0.32 million Israeli citizens live in the West Bank, including in Eastern Jerusalem. Since September 2005, there are no Israelis in the Gaza strip any longer. Such rapid demographic growth will have relatively great impact on the transport network in particular the road network.

\textsuperscript{13}The Humanitarian Monitor, March 2007. Unemployment rates are measured in terms of the relaxed definition by the PCBS while Poverty rates are based on consumption, as measured by PCBS.
Governance: Administratively, the WBG are divided into 11 and 5 governorates, respectively. The attached map (at end of the report) shows the governorates that make up the Palestinian territories. After 1967, the West Bank and Gaza came under the Civil Administration of the Israeli military. However, this situation changed as a result of the peace process that started in 1990 between the Palestinians and the Israelis and the Oslo Interim Agreement that was signed in 1993. This Agreement divided the WBG into three areas as noted above A, B and C. Later in 1995, Israel’s disengagement from Gaza and parts of the West Bank resulted in the PA’s gaining its jurisdiction over the entire Gaza Strip except for its borders.

Transport and the Economy: Table 1 shows the development of major sectors of the economy, and taking into account the overall contraction of the economy during the period 1994-2005. The fact that transport services have become relatively more important during the period likely reflects that the demand for transport services by persons has remained relatively strong although incomes have declined, and that the cost of transport has gone up in real terms.

Since the outbreak of the latest Intifada in September 2000, Israel has significantly tightened the closure on the WBG. In 2005 alone the total income lost because of lower employment and closures has been estimated at US$750 million, an equivalent of 58 percent of the total aid of US$1.3 billion provided to the Palestinian Authority in 2005.

Table 1: Transport Sector Contribution to the GDP (in percent), 1994-2005

<table>
<thead>
<tr>
<th>Sector</th>
<th>2005</th>
<th>2000</th>
<th>1994</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and Fishing</td>
<td>7</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Mining, manufacturing, electricity &amp; water</td>
<td>13</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>Construction</td>
<td>3</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>8</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Transport</td>
<td>10</td>
<td>5</td>
<td>3.5</td>
</tr>
<tr>
<td>Other Services</td>
<td>25</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>Public Administration and Defense</td>
<td>18</td>
<td>13</td>
<td>10</td>
</tr>
</tbody>
</table>

PA fiscal situation: The financial situation of the PA severely constrained due to two basic reasons: First, since the establishment of the PA, the share of public expenditure of GDP has been rising rapidly. The increase reflects the large number of persons employed by the PA and that the wage bill has been rising while the private sector contribution has been declining. Second, the PA has little control over its revenues especially that from the

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14 Unemployment and poverty rates are presented in Section 1.3.2
15 World Bank, 2006
16 The World Bank, Investment Climate Assessment: Unlocking the Potential of the Private Sector, March 20, 2007
clearance revenues collected by GOI on behalf of the PA. Clearance revenue made up more than 60 percent of PA revenues before the outbreak of the Intifada, but the transfer of these revenues suspended by the GOI have been irregular since January 2001 to date.

The international community has endeavoured to cushion the impact on the PA government’s financial and diplomatic isolation on the population, by channelling its support by other means. Indeed external support is estimated to have reached almost US$750 million in 2006, more than twice the amount received in 2005. On the other hand, support to project financing is estimated to have fallen by almost half in 2006, to about US$180 million, compared with some US$330 million in 2005. Donor investment in infrastructure has been particularly been limited due to the complications of movement and access and other political considerations affecting this sector.

1.2 The Purpose and Structure of the Report

The main purpose of this TSN is to assist the Palestinian Authority (PA) in developing a strategy for the sector that can contribute to addressing the immediate constraints and transport issues in support of the PA’s effort to revive the national economy, improve mobility and reduce poverty. The TSN also aims to assist the responsible sector ministries prepare a coherent strategic framework and program for the sector. Secondary objectives are to update the Bank’s knowledge of the transport sector priorities in light of recent developments; and identify priority interventions and support for the donor community’s consideration.

The scope of this TSN encompasses the transport infrastructure, including the road network, ports, and crossings, as well as the public transport system. However, the operations and management of border crossings and terminals are outside the scope of this TSN. It is to be noted that in parallel with the TSN, the Bank has also undertaken a number of separate reports on movement and access issues and trade facilitation, which deal directly with the issue of the management and operations of passenger and commercial crossings. This body of work has been referenced extensively where movement and access and trade facilitation issues are addressed in this document, and should be seen as another important input into the strategic framework which the PA will need to develop.

In addition to this introductory chapter, the rest of the Note includes a review of the following issues:

Chapter 2: Current Status of the Transport Sector
- Institutional Arrangements
- Road Traffic and Transport Legal Framework

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17 This is part of the Paris Agreement in 1994 between the PA and GOI on establishing a quasi-customs union between Israel and WBG.
18 The TSN should also be useful to the PA in its discussions with Israel.
• Roads, Road Maintenance and Road Development
• Public Transport
• Commercial Transport
• Movement and Access Restrictions and their Implications
• Sector Financing and Donors Contribution
• Summary of the Key Issues in the Transport Sector

Chapter 3: Proposed Strategic Framework for Development of the Transport Sector

• Objective and Assumptions
• Strategic Objectives and Directions
• Consistency with the Palestinian Authority’s Plans in the Transport Sector
• Immediate/Short Term Actions
• Medium to Longer Term Actions: Improve Mobility and Connectivity
• Implementation Action Plan

Chapter 4: Financing the Proposed Strategic Framework

• Assumptions
• Risks
• Priority Investment Program
2. Current Status of the Transport Sector

This section presents a diagnosis of the elements of the transport sector and a summary of the main issues facing its development. It starts with laying out the overarching restrictions on movement and access and their implications followed by the current institutional arrangements and the various actors in this sector, mandates and issues; followed by presenting an assessment of the road traffic and legal framework and the main concerns; then the roads network and the challenges facing the roads maintenance and development programs. This section also presents an assessment of the public and commercial transport and the constraints facing their development. A review of the sector financing and donors’ contribution is also presented with a highlight of key areas for support. Finally, this section concludes with a presentation of a summary of the issues facing the transport sector.

2.1 Movement and Access Restrictions and their Implications on the Transport Sector

The more binding constraints on economic activity in the WBG are the movement and access restrictions which lead to uncertainty and higher costs of doing business. This closure policy consists of varying levels and types of restrictions depending on the destination and have in combination resulted in a highly fragmented Palestinian economy. These levels and types include: a) comprehensive restrictions on the movement of people and goods within the West Bank, b) highly constricted movement of goods across the border with Israel and neighboring countries, and c) a near total separation of economic and social interaction between the territories of Gaza and the West Bank. In economic terms, the restrictions arising from closure have not only increased transaction costs, but have also led to a level of uncertainty and inefficiency which has made the conduct of business extremely difficult and therefore has stymied the growth and investment which is necessary to fuel economic revival.20

General Description of the Closure Regime

Movement of people and goods between the WBG and Israel and neighboring countries is controlled through designated terminals and crossings. These crossings operate at varying capacities and schedules and impose varying levels of security checks, depending on the location and type of crossing and the direction of movement. By far the most restrictive crossings are those surrounding Gaza, particularly crossings being used to move people or goods from Gaza into Israel (Karni/ Al-Montar for goods, and Erez/ Beit Hanoun for people). These crossings have more recently been established in the West Bank as well and include Jalameh, Bisan, Qalqilyah, Taybeh/ Sha’ar Ephraim in the North, Hawara and Awarta around Nablus, Beitunia and Qalandia near Ramallah, Terminal 300/ Rachel’s Tomb and Mazmuriya/ Har Homa (Jabala Abu Gnaim) around Bethlehem, and Tarqumiyyah in the South among many other smaller crossing points and terminal-like checkpoints.

Since the Israeli withdrawal from Gaza, there are no longer Israeli-imposed movement restrictions within the Gaza Strip. However, within the West Bank, closure is implemented

through a complex regime of policies and practices which has fragmented the territory. As a result, many areas of the West Bank are off-limits to Palestinian access or of limited use. Similarly, Palestinians are restricted from accessing Israeli settlement areas since these are designated as closed military areas; this includes the built up areas as well as all areas within the “settlement boundaries”. Equally important, the even more broadly defined “settlement regional jurisdiction” is also restricted to Palestinian economic use.

Palestinians in the West Bank are exposed to other types of restrictions. For example, they are restricted from using certain main roads that have been constructed by the Israelis for the use of settlers. Similarly, Palestinians without evidence of residency in the Jordan Valley are restricted from accessing that area with their vehicles, and all Palestinians with West Bank IDs require special permits to enter East Jerusalem. Palestinians without evidence of land ownership in areas west of the Separation Barrier are restricted from accessing those areas. In addition to these restrictions, there are hundreds of physical impediments of various types (manned and unmanned checkpoints, earth mounds, etc.) along various routes within the West Bank. In its recent publication on movement and access restrictions, the World Bank states:

“Estimates of the total restricted area are difficult to come by, but it appears to be in excess of 40 percent of the land of the West Bank. While Israeli security concerns are undeniable and must be addressed, it is often difficult to reconcile the use of movement and access restrictions for security purposes from their use to expand and protect settlement activity and the relatively unhindered movement of settlers and other Israelis in and out of the West Bank.” ... “Economic recovery and sustainable growth will require a fundamental reassessment of closure practices, a restoration of the presumption of movement, and review of Israeli control of the population registry and other means of dictating the residency of Palestinians within WB&G as embodied in the existing agreements between GOI and the PA.”

Implications of Closure on Poverty in the West Bank and Gaza

The unemployment rate has increased substantially as a result of the closure regime adopted immediately after the start of the Intifada. Unemployment rose from 16 percent in the third quarter of 2000 to 23.6 (18.6 percent in the West Bank and 34.8 percent in Gaza Strip) in 3rd Quarter of 2006. Consequently, poverty rate increased from 31 percent in 2000 to 43 percent in 2005. Moreover, surveys conducted regularly by Near Eastern Consulting (NEC) indicate that the percentage of households falling below the poverty line was 66 percent at the end of 2006.

21 It is worth mentioning that Palestinian access to Jerusalem by Palestinian registered vehicles has been gradually restricted since the Oslo agreement in 1993 until it completely stopped in 2000.
22 In addition to the Separation Barrier, in the year between the advent of the AMA and November 2006, the number of physical impediments in the West Bank increased by some 44 percent (OCHA). In March 2007, OCHA reported that physical impediments were even slightly higher again (546 in March 2007 vs. 540 in November 2006).
The closure regime has also affected the cost of movement and travel. Average household expenditures on transport accounted for 9.3% of spending costing 2005. Public transport cost between major urban areas in the West Bank has doubled while travel time tripled by early 2007 as shown in Table 3 below. These figures are considered relatively high and such increase in transport cost poses greater burden when it comes to the poor who already has limited money to spend. This becomes alarming when nearly 48 percent of the population is currently living below the official poverty line. As a result, some of them limit their travel to the necessity, or in few cases some chose to walk, when possible.

Table 3: Example on Increased Travel Cost and Time between Nablus - Tulkarem

<table>
<thead>
<tr>
<th></th>
<th>Prior to Year 2000</th>
<th>1st Quarter of 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traveled Distance</td>
<td>28 km</td>
<td>28 km</td>
</tr>
<tr>
<td>Travel Time</td>
<td>25 minutes</td>
<td>80 minutes</td>
</tr>
<tr>
<td>Travel Cost (per trip)</td>
<td>NIS 6 (US$1.4)</td>
<td>NIS 11 (US$2.7)</td>
</tr>
</tbody>
</table>

The movement restrictions imposed on Palestinians in the Jordan Valley has also affected their income levels. In 2005, the Jordan Valley Farmers’ Union incurred a 30 percent loss in revenue due to the combination of restrictions imposed on the transportation of produce to Israel and to West Bank markets. Another segment of the poor Palestinian population who were affected by the “Separation Barrier” also suffer consequences of limited or no access to their farm land, the only source of income.

2.2 Institutional Arrangements

There are several government entities that play a role in the management and development of the transport sector, including:

- The Ministry of Transport (MOT) is responsible for policy development and implementation, and the overall coordination of sector planning. It manages the road traffic and transport regulatory system, including registers of vehicles and driver’s licences, the testing of vehicles and drivers, vehicle licensing as well as road safety. It is the parent of: (i) the Civil Aviation Authority and (ii) the Port Authority, both which will be described below.
- The Ministry of Public Works and Housing (MPWH) is responsible for the maintenance and rehabilitation of main and regional roads (outside municipal and village councils) within the PA controlled areas except those in areas “C” (which are managed by Israel);
- The Ministry of Agriculture (MOA) is responsible for management of rural roads;

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26 UNRWA estimates show most of the poor (nearly 820,000 persons) also live in deep poverty.
27 Field Survey carried out by Universal Group consulting firm in 2007 for the purpose of the TSRSN.
28 OCHA, 2005
29 Private companies operate the vehicle testing centres under concession agreements with MOT.
30 Previously named Ministry of Public Works.
The Ministry of Planning (MOP) has, in addition to the overall responsibility for the preparation of national economic and poverty eradication plans, the responsibility for regional planning and policy formulation including in the transport sector;

The Palestinian Economic Council for Development and Reconstruction (PECDAR) was established in 1993, before the other ministries of the PA, in order to fast track the implementation of donor-financed TA and investment projects. It has been implementing road rehabilitation and construction projects since then. Its Road Division still manages road projects financed by donor support.

The General Administration of Crossings and Borders (GACB) is responsible for the management, operation, and development of all terminals and crossings. To date, the GACB manages the Palestinian side of Karni/ Al-Montar, Rafah, Erez/ Beit Hanoun, Allenby, Nahal Oz (for fuel), and Sufa/ Sofa (when in use). The GACB has no presence at crossings within or around the West Bank with Israel. The GACB’s authority at the crossings does not extend to customs or revenues, which is managed by the Customs and Revenues Department.

The Local Governments (municipalities and village councils) are responsible for the road network with their immediate jurisdiction. This includes planning, development and maintaining the network.

While there is no harm in having as many institutions in the sector, which is not usual for a small country such as the WBG, however, the situation becomes counter effective when these institutions work independently from each other. The situation even becomes graver when these institutions operate without any reference to a national development plan that could govern the sector. Furthermore, and while it is important to build strong capacities at these ministries there is already competition for scarce qualified human capital jeopardizing the performance of each institution.

Main issues: As mentioned two main issues related to the current arrangements are\(^{31}\) (i) overlapping responsibilities in the road sector and (ii) overlapping responsibilities for planning. A third concern is that commercial and regulatory activities are being carried out by one and the same public administration. The MOT through its authorities\(^{32}\) is thus involved in both commercial and regulatory activities, at least nominally so. The arrangements in civil aviation do e.g. not conform to ICAO recommendations, and are not in line with practice elsewhere.

### 2.3 Road Traffic and Transport Legal Framework

The Transport Sector is currently governed by a number of laws. In 2000 and 2005, the Road Traffic (No. 5) and Traffic Insurance (No. 20) Laws were approved by the PLC, respectively, while the Road Law is still pending reviews and approval\(^{33}\). Whilst law No. 5

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\(^{31}\) There are additional generic issues related to the PA public administration; see World Bank: West Bank and Gaza Public Expenditure Review; From Crisis to Greater Fiscal Independence, February 2007.

\(^{32}\) It is understood that the authorities under the MOT are integral parts of this ministry, thus reporting directly to the minister.

\(^{33}\) One of the main functions of a road law is that it classifies the road networks in terms of who is the owner/administrator for which road class/type and which section of road, including urban or municipal roads and rural access/feeder roads serving agriculture and rural communities.
has been passed, it is only partially in effect because of the missing regulations necessary to guide the implementation of the law. Hence the road traffic that is currently in effect is regulated by the legislation introduced by the Israeli administration pre-Oslo (1993). It is equally important to note that these laws are only effective in PA controlled areas in WBG and not in Area C which still controlled by GOI.

All transport of goods and people are performed by private companies. Hence, to perform public transport a ‘public transport permit/license’ issued by MOT is required. These are required for all types of vehicles including buses, shared taxis and taxis. Furthermore, a permit/license is required by the vehicle operator confirming his/her qualification and ability to operate such vehicle as well as by the vehicle to ensure its suitability for public transport. These permits/licenses have limited validity and renewal on regular basis is necessary.

Enforcement of the traffic law, or lack of it, is costing the PA millions of dollars in lost revenues from one of the main PA revenue generating instruments. For example, in 2000, the PA’s revenues from the transport sector was about US$34.5 million which dropped significantly, during the 2002 intense fighting between the Palestinians and the Israeli army, to only US$16 million. Later in 2005 and as a result of renewed enforcement, the revenues increased to about US$32.8 million, this is despite the 50 percent discount issued by the MOT to encourage owners to register their vehicles and pay their fees.

Permits/Licenses for buses and shared taxis apply to specific routes, whilst permits for taxis may be somewhat more flexible in terms of the allowed area of operation. Permits/Licenses are issued by MOT based on a ‘needs assessment’ or a ‘formula’. This formula lacks the element of demand associated with other socio-economic characteristics of travel resulting in confused estimates of what the real demand is. For example, while MOT’s demand estimates of 6,500 permits in 2003 in the West Bank, just over 5,900 permits were issued. This number has increased by nearly 34 percent in 2004 and by 53 percent in 2005 to reach around 9,050. However, in the last year, efforts have been made by MOT to recall permits/licences issued in excess of the demand.

Freight transport for hire and reward also requires a permit. The granting of a permit is made by the Ministry of National Economy while the vehicle inspection and registration is still within MOT’s mandate. There is no price regulation of freight transport which may need revisiting due to its possible impact on the PA’s revenues.

The major issues as concerns road traffic and transport are the following:

Lack of enforcement: For a host of reasons, enforcement of road traffic and transport regulations is weak. This means that (i) road traffic safety is poor; (ii) the PA’s revenues are lower; and (iii) legal operators face unfair competition.

Poor profitability: On account of the fact that there is excess supply (as a consequence of the current regulatory regime) and many illegal operators, profitability is low. This means that there is underinvestment in the vehicles fleet and that existing vehicles are ageing.

34 Source – Ministry of Transport
Inadequate regulatory regime for public transport: With the passing of two major laws and the drafting of a third one, as mentioned above, there is a need now for regulations to provide the necessary frame for enforcement. As a result, the former regulations which were practiced by Israel in the Palestinian cities are being used. In particular and among many others, there is a need for clear regulation for granting services concessions to be performed by the private sector.

The need for reviewing the regulatory regime for public transport was recognised in the Transport Sector Study of 2000. The circumstances since the 2nd Intifada have prevented the PA from taking appropriate actions however the PA is encouraged to do so as seen necessary by this Strategic Framework.

2.4 Roads, Road Maintenance and Road Development

If allowed to function satisfactorily, the WBG road network length seems generally satisfying to the needs of the economy and the size of the population as the average distance to a paved road is relatively short. The estimated length of the paved road network is almost 5,000 km\(^{35}\) according to the Palestinian Central Bureau of Statistics (PCBS), including almost 1000 km of bypass roads serving Israeli settlements in Area C\(^{36}\). In addition comes about 2,000-3,000 km of local access roads that are unpaved and in many cases not more than earth tracks. Traffic levels on arterial roads range between a few hundred and up to 15,000 vehicles per day and are growing at about four to five percent annually. However and as mentioned in Section 1.3.1 above, many of the main roads are still under Israeli control and of very limited access to Palestinian traffic.

Loss of Road Assets: A relatively high proportion of the road network is in poor or failed condition. No comprehensive road condition survey has been carried out since 1996, so the exact lengths of roads in different condition categories (very good, good, fair, poor, and failed) are broad estimates. Based on a partial inspection carried out in 1999 and recent estimates by MPWH large sections of the road network are considered in an unsatisfactory condition (poor, very poor or failed), due to lack of regular maintenance over many years. Because of actions imposed by Israel after the second Intifada, the already old roads mainly serving Palestinian areas have sustained severe additional damages including destruction of long sections of road pavements, bridges, road furniture and traffic control devices. Table 2 below shows the current condition of the network. Restoring the road network would cost in the order of US$80 million per year over a 5 year period; see further Annex 5.

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35 The number of paved kilometers varies amongst PA instructions. For example, MPWH’s estimate is around 2,690 km while MOP’s is around 2,250 km, both without the settlement roads. This is another evidence of the limited institutional capacity within this sector.

36 A large size of the road network, in particular, the main and regional roads outside the municipal boundaries and located in Area C, defined earlier, is still under Israel’s control.
### Table 2: Pavement Conditions of the Road Network in 2006 by Road Class and in Percent

<table>
<thead>
<tr>
<th>Road Class</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main</td>
<td>34</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>Regional</td>
<td>16</td>
<td>32</td>
<td>52</td>
</tr>
<tr>
<td>Local</td>
<td>18</td>
<td>26</td>
<td>56</td>
</tr>
<tr>
<td>Overall Average</td>
<td>23</td>
<td>29</td>
<td>48</td>
</tr>
</tbody>
</table>


**Rural Accessibility:** The restrictions imposed by the GOI on the movement of people and goods and the Separation Barrier have made the generally poor rural accessibility in the West Bank much worse, and in many communities the increased isolation has seriously affected the livelihood of rural communities and their access to employment, markets, and basic social services. In rural areas with road access, the roads are often narrow with poor alignment causing accidents and inadequate and costly provision of public transport services. Addressing this rural isolation with better access roads connecting villages and communities with the paved road network is expected to be a key element in any strategy to address poverty.

**Management of the road network is weak and staffing inadequate:** As already mentioned, the responsibilities for road planning, construction, maintenance and funding are split between multiple ministries and agencies depending on the type of work, funding source, and category of road in a way that is confusing and overlapping. This situation is compounded by a weak information base in the road sector generally that creates uncertainty as to the state of the network, sharing of responsibilities including budgeting for road maintenance within municipalities, and costing of road works.

Furthermore, the organizational diagram of MPWH (see Annex 2) shows a very compartmentalized institution with all road management activities divided between just two departments, the Directorate for Roads and the Directorate for Supervision and Follow-up which presumably include follow-up of housing and other public works projects as well. In these directorates, MPWH has a regular staff of about 120, with 40 in the West Bank office in Ramallah and 80 in their offices in the Gaza Strip. That amounts to about 3 staff per 100 km of roads which is low by international standards. Even if the staff of PECDAR involved in road management would be merged with MPWH’s roads directorates, one would still have a very small group of professionals in charge of a substantial network with an asset value of more than US$2 billion. Building permanent capacity will be a challenge under such conditions.

**Need for Road Classification:** As suggested elsewhere in this TSN, it is assumed that all road management functions will be consolidated and performed by one organization, which would also become responsible for local rural roads (village and community access roads). However, regular access roads to farms and purely agricultural development roads would still be a responsibility of the MOA. Furthermore urban and municipal development plans would have to remain within the responsibilities of the municipalities and village councils.
In order for this to function satisfactorily it will be necessary to undertake a full classification of the road networks. This will bring clarity in the allocation of roads to administrative units and define ownerships for road right-of-ways. This work should, however, be preceded by completion of the work on a new road law that has been ongoing for some time.

2.5 Public Transport

Unlike many countries in the region, the Palestinian public transport services have been entirely privatized. This in itself is a positive trend especially with the current PA’s fiscal crisis. However, there are several issues still constraining the delivery of services, including:

a) the bus companies or taxi offices are often family owned and managed in a traditional way with very limited initiatives for business plan development or future planning concepts;
b) the companies’ owners have very limited access to financing schemes to sustain their businesses;
c) the bus or taxi lines are often issued by MOT without clear criteria for concessions nor competitive selection process;
d) MOT lacks adequate capacity in drafting or monitoring concessions regulations and contracts;
e) companies face high operations cost due to:
   i. the very poor road network condition; and
   ii. delays at checkpoints,
f) competition from the informal sector;
g) movement restrictions and the need to acquire special permits from Israel for vehicles and drivers especially those going on the regional and main (intercity) roads in the West Bank which are still controlled by GOI;
h) loss of specific routes especially that through Jerusalem; and
i) loss of easier access through Jerusalem while having to access inadequate bypass roads (through “Wadi An-Nar” or “Valley of Fire” just east of Jerusalem).

Due to the highly volatile political environment and the unpredictable future many transport companies have been unable to access low interest rate loans from the locally based commercial banks. Moreover some are hesitant to borrow due to the unpredictable levels of revenues and their ability to repay on time. In the late nineties, the Netherlands had extended financial assistance to a number of bus companies in the form of soft loans in the amount of US$10 million. It is understood that these loans have not been repaid in full. It is believed that access to adequate funding would be necessary to sustain the existence of these companies but this may also be subject to certain reform measures that these companies may need to carry out as prerequisite to access such funding.
2.6 Commercial Transport

As stated in earlier, the Bank has also undertaken a number of separate reports on movement and access issues and trade facilitation\textsuperscript{37}. These documents provide analysis and technical advice on internal movement restrictions, crossing logistics, trade facilitation, customs, and related topics. A background on these issues has already been presented earlier in this section, and the Bank’s three latest reports on movement and access issues can be referenced for a more complete description. This section of the TSN focuses on the key issues from those and other sources with regards to the international transport of goods to and from the Palestinian territories by land, air, and sea.

In approximate terms the total value of imports into the West Bank and Gaza is about US$2.5 billion, whilst the value of exports amount to some US$0.3 billion, although the values have fluctuated significantly during the past decade. Israel is by far the largest trade partner; some 90-95 percent of exports (in value) are for Israel, while some 75-80 percent of imports derive there from. Arab countries provide some 3 percent of exports and take about 6 percent of the exports. Some 30 percent of imports are for Gaza, but only some 15 percent of exports derive from Gaza.

Current rules for undertaking transport of goods, which is exclusively by truck from the WBG all the way to a neighbouring market or through Israeli, Jordanian, or Egyptian ports and airports, inhibits market diversification and favours trade relations with Israel. The current situation also reflects that under the Paris Protocol\textsuperscript{38}, the West Bank and Gaza is under a quasi-customs union with Israel, harmonizing trade policies and maintaining a single customs area and market.

Land Transport

All transport is through land borders controlled by Israel. For transport of goods between the West Bank and Israel there are three major commercial crossings near or on the Green Line, Al-Jalameh near Jenin in the north, Al-Taibeh/Faroun near Tulkarm in the west; and Tarqumia near Hebron in the South, as well as other terminal-like commercial checkpoints within the West Bank (Beitunia near Ramallah and Mazmuriya/ Har Homa near Bethlehem). Freight traffic between Israel and Gaza is today mainly through Al-Montar/Karni, whilst Erez, which used to be the main crossing before the Intifada, is nowadays only used intermittently. A further crossing is at Sofah/ Sufa, near the Egyptian border, but it is only used for the transport of gravel and aggregates. Also, the Nahal Oz terminal is used for transfer of fuel into the Gaza Strip.


\textsuperscript{38} An agreement entered into by the GOI and the PA following the Oslo Agreement, 1993.
Movement of goods through these crossings requires a permit and proper tax documentation, unloading/reloading of goods between Palestinian and Israeli trucks combined with some form of a security check and often involve a queue depending on the crossing and traffic. Crossing operating hours and processing times are unreliable and unpredictable, resulting in uncertainty and higher transaction costs. Karni/Al-Montar crossing is particularly notoriously unreliable and acts as a very tight constraint on the Gaza economy, to the extent that many Palestinian businesses (which rely primarily on Israel for both inputs and as a market) have closed shop and moved their businesses to Egypt and other countries.

Movement of people through these crossings is dependent on a permit and security check and also involves a queue and waiting period of varying length depending on the crossing and the traffic. These crossings are used to regulate the flow of Palestinian labor into Israel, which dropped from 146,000 prior to September 2000 to some 60,000 in 2006. Furthermore, special permits are required for Palestinians with West Bank ID to travel through Israel into Gaza and visa versa, which are issued only for special cases, effectively cutting off the West Bank and Gaza populations from one another.

39 In accordance with the Agreement of Movement and Access of November 2005 the average daily number of trucks exporting goods through Gaza’s Karni crossing was targeted to increase from 50 in November 2005 to 150 per day by end 2005 and to 400 per day by end of 2006. In 2006, the average daily number of trucks was only 17.
At all the afore-mentioned crossings, back-to-back operations are mandatory, all goods and containers have to be scanned and inspected, procedures which result in delays and increased damage of goods (much of West Bank and Gaza exports are made up of vegetables). The worst performer is Al-Montar/Karni, which is the lifeline of Gaza. Present throughput at that crossing is much below what is allowed in terms of the AMA; see footnote 5. The GOI refers to security concerns, but independent observers have also criticised the Israeli authorities for poor management, pointed to weak capacity on the Palestinian side, and charged that operations are hampered by corruption.

Movement of persons and goods between WBG and neighboring countries has similarly been constrained. Two international border crossings are available for Palestinian use, Rafah into Egypt and Allenby into Jordan. While both border crossings entail permits, security checks and procedures, Allenby is typically open on a reliable though limited basis, while Rafah has been subject to prolonged and repetitive closures. Furthermore, while Allenby is used for trade of goods, Rafah is used for movement of individuals only. Another border crossing with Jordan, Damieh bridge, used to be available for commercial use (and even individuals at one point), but was closed by the Israelis in late 2005.

At the Gaza border with Egypt, another border crossing (Kerem Shalom/ Karm Abu Salem) was intended for use for imports into Gaza, but has yet to be opened (see box on Agreement on Movement and Access for more details). The border crossing at Rafah between Egypt and Gaza was used before the Intifada for the imports of goods from Egypt. As provided for under the Agreement on Movement and Access (AMA), negotiated at the time of Israeli withdrawal from Gaza in 2005, the Rafah border crossing has now been handed over for operation by the PA, with third party monitoring provided by the EU, and additional scrutiny by CCTV operated by the Israelis. The AMA provides for the crossing to be used for exports as from November 2005 and for imports after the first year of operation. Palestinian imports and export enjoy free transit through Egypt. However, as yet the Israeli authorities have not allowed Rafah to be used for goods despite the provision in the AMA that it be used for Palestinian exports.

Transport to and from the West Bank and Gaza is also affected by a number of other rules which make imports and exports costly. For example all clearance at sea and air ports has to be done by Israeli agents and the goods are subjected to special security inspection. Air transport has to be handled by all cargo airliners as the goods may not be shipped in the hold of passenger aircraft. It is not possible to effect one shipment for both the West Bank and Gaza; they have to be separate.

Air Transport
The construction of Gaza International Airport in the period of 1995 and 1998 presented an opportunity to improve access to regional and international destinations and markets. The US$86.5 million airport, which was built partially with grants from the international community (46 percent), soft loans (45 percent) and self PA financing (nine percent) was an additional transport mean for the one and half million Palestinians living in Gaza. The airport was also meant to serve the rest of the Palestinian population living in the West Bank especially with the establishment of the convoy system in 1996. However, and towards the beginning of the Intifada and the immediate Israeli response to stop the operations at the airport, stop the convoy system between Gaza and West Bank and then
soon after destroy most of the airport infrastructure eliminating any chance to use the airport until further notice\textsuperscript{40}.

The GIA was built in accordance with International Civil Aviation Organization (ICAO) standards and with the agreement of both, Egypt and Israel. The agreement with Egypt was necessary since the location of the airport was near the Gaza-Egypt border and permission to Egyptian airspace for landing and take-off was crucial. Similarly, the agreement with Israel was in accordance with the Wye River Memorandum which allowed Israel to monitor and control arriving and departing passengers and cargo.

In the West Bank, the other hand, the PA had plans to remobilize the Qalandia Airport in East Jerusalem\textsuperscript{41} once it regained control over the area. In the meantime, Palestinians living in the West Bank, except for those living in East Jerusalem who can use Ben Gurion Airport in Tel Aviv, have to make the journey to Jordan and use Queen Alia Airport.

The Palestinian Civil Aviation Authority (CAA) was created to administer and operate the airport. The CAA is part of the Ministry of Transport. It has eight departments, including engineering and maintenance, air transport, and air safety. There used to be 700 Palestinians working in the authority, in the airport, and in the Palestinian Airlines (PAL) while GIA was operational (pre September 2000). Utilization of the airport during 1999 was much below its capacity due to Israeli restrictions and the limited market in Gaza. It was used by the Palestinian Airlines as well as airlines from Jordan, Egypt, Morocco and Romania.

Following the outbreak of the Intifada in September 2000, and as mentioned above, the GIA was closed, and from 2001 till 2005 it sustained severe damage from the Israeli Defence Force. The GIA therefore requires extensive rehabilitation before operations can be resumed. An assessment made by an international consultant in 2006 estimates the total damage to the airport was US$28 million but about US$9.5 million would be needed to bring the airport back into operation. However, no detailed plans have been prepared for the rehabilitation works, which will have to involve all the major installations at the airport. Moreover, and while the Agreement on Movement and Access, in 2005 confirmed the importance of the Airport, the security arrangements, reconstruction, operation of the Airport were to be discussed further (see footnote No. 34).

PAL, which is operated by under the CAA, started its operations in 1997 out of Al-Areeesh Airport in Egypt. It reached peak operations when upon the opening of the GIA, but since moving back to Al-Areeesh in late 2000, traffic has slumped considerably.

\textsuperscript{40} The Agreement on Movement and Access of November 15, 2005, noted that “The parties agree on the importance of the airport. Discussions will continue on the issues of security arrangements, construction, and operation.” Therefore, reference to further work on the airport will be subject to further Palestinian – Israeli discussions and agreement.

\textsuperscript{41} Controlled by Israel since 1967 and used during the 1990s for internal flights within Israel but closed since the beginning of the Intifada in September 2000. This airport was boycotted by the ICAO members for international use since it is located in the Palestinian occupied territories and in accordance with the United Nations resolutions.
Sea Transport

The PA’s decision to construct and operate a seaport was based on a number of factors: One, primarily seen from a pure sovereignty perspective; while, Two, to reduce the reliance on the Israeli seaports (Ashdod and Haifa) for imports and exports of goods by maritime transport which has been effect since 1967. This reliance which is characterized by being costly, time-consuming and often unreliable on the account of the number of restrictions imposed on the Palestinian trade.

The construction of the new seaport in Gaza, which started in July 2000, was planned in three phases, the first of which estimated at US$80 million. This funding was secured through grants and soft loans from European donors and agencies, as well as from the PA own resources.

The Palestinian Seaports Authority was set up in 1999 to oversee construction and later to operate the port. To commence construction an agreement was reached with the GOI covering operations and security referred to as the joint Sea Port Protocol. It also provides for the legal framework to be developed to provide a basis for the management and regulation of the seaport.

Following the outbreak of the Intifada in September 2000, construction stopped. Since very limited constructions works had been completed, the damage made has only involved the installations made as part of the preparation for the construction works. The Bank has subsequently recommended that the previous plans should be revised, and that the port should be developed in a modular fashion, beginning with a simple Roll-on - Roll-off (Ro-Ro) pier, in order to accelerate the port’s opening. Whilst several studies have been carried out for the port since then, including of its location, no detailed plans for what to do have been prepared.

However, the acceptance of a third party role in Rafah (Section 2.3), paves the way to resuming works on the seaport. The Agreement on Movement and Access states that “construction of a seaport can commence. The GOI will undertake to assure donors that it will not interfere with operation of the port. The parties will establish a US-led tripartite committee to develop security and other relevant arrangements for the port prior to its opening. The third party model to be used at Rafah will provide the basis for this work”.

The issues confronting the seaport are similar to those of the GIA. However, whilst the current joint Sea Port Protocol will have to be reviewed by the parties, the detailed planning for the seaport can commence soon in view of the Agreement on Movement and Access. As indicated, there is a need to review if the first phase can be slimmed down, and also to consider if a Ro-Ro pier could be used for passenger and goods operations. In addition, there is a need to review the implications of the financial commitments made as part of the earlier construction works.

2.7 Sector Financing and Donors Contribution

This sector has been financed primarily by the donor community with little contribution from the PA’s own resources. Form the type of project financed, the donor community’s contribution to the Transport Sector has been more strategic during the period of 1994 - 2000. Such contributions aimed at rehabilitating much needed urban, inter-urban and rural roads, the construction of the Gaza International Airport, the commitment to finance the Gaza Seaport and some support to public transport. However, and with the start of the Intifada and the resultant escalation of violence since September 2000 – to date, such support has been refocused towards road damage repair and intensive labor type road rehabilitation subprojects.

The involvement of several institutions together with the absence of clear mandate in the transport sector, as described in the institutional section above, have impacted the accurate accounting of donors support in this sector. For example, contributions were and continue to be channelled through a number of venues including: a) sectors other than the Transport Sector such as employment generation, urban and rural (community) development or damage repair; or b) through bi-lateral agreements with PA institutions or through multilateral and UN agencies, national and international NGOs, and through local communities. As a result, very limited reporting to a central agency is done on exactly what has been funded and where. The TSN estimates that about US$337 million of donors’ funds have been contributed to this sector, a summary of which is presented in Table 4.

With the escalating conflict and the reduced coordination between the PA and GOI it became extremely difficult for the donor community to finance large scale infrastructure projects, especially that in Area C in the West Bank or that require GOI pre-approval such as the GIA and Gaza Seaport. One of the very few major contributions came from USAID’s in late 2005 which rehabilitated some 15 km of the Jenin – Nablus road. Similarly, PEC DAR has in recent years received support for road rehabilitation projects from ABAE D, IDB, French Development Agency (AFD), and Japan International Cooperation Agency (JICA). Currently, efforts are being exerted, but with difficulty, to rehabilitate the severely damaged Ramallah – Qalandia road which is still under Israeli control. Already the German Bank for Development has expressed readiness to finance the much needed road rehabilitation.

In recent years, some donors have refocused their support on road maintenance and emergency damage repair executed by the MPWH. To this effect, contributions were received from the Islamic Development Bank managed Al-Aqsa Fund, the World Bank, the Arabic Bank for Economic Development of Africa (BADEA) and from OPEC Fund.

Other initiatives that were approved for the transport sector was in 2005 when the European Union agreed to sponsor the establishment of a Joint Transport Office (JTO), as a mechanism for coordination and communication between the Israelis and the Palestinians in the transport sector. The idea was launched during the 5th meeting of the Euro-Mediterranean Transport Forum in December 2004 and concretized in March 2005 with the two parties (the Palestinian Transport Minister on the one hand and the Israeli Transport Director General on the other hand) signing bilateral agreements with the European Commission. However, and with the EC’s 2006 policy vis-à-vis support to the
Hamas led government and the inability to channel funds other than for humanitarian purposes, this initiative has not been materialized.

As shown in Table 4, donors financing in the transport sector, based on information received from MOP, PECDAR and MPWH, has been directed to the road sector particularly towards damage repair, maintenance and rehabilitation. Altogether some US$240 million has been spent on such projects over the past 13 years with annual average of US$18.5 million. The expenditures by donors may seem high, but as discussed in Section 2.4 and Annex 5, some US$400 million are required at present to rehabilitate the road network. In addition, some US$30 to 40 million is required annually to maintain the road network once it has been rehabilitated. And these sums apply to the public network only, and thus do not include roads and streets in municipal areas.

Table 4: Donors Contribution (in actual disbursement) to the Transport Sector/Sub-sector (1994 – 2007)

<table>
<thead>
<tr>
<th>Transport Sector/Sub-sector</th>
<th>Donors</th>
<th>Contribution (US$M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Rehabilitation</td>
<td>IDB, , BADEA, IDB, Japan, World Bank, OPEC</td>
<td>34.3</td>
</tr>
<tr>
<td>Road Development and Rehabilitation</td>
<td>Saudi Arabia, World Bank, Arab Fund, EIB, EU, Arab Fund, IDB, France (AFD)</td>
<td>183.3</td>
</tr>
<tr>
<td>Road Damage Repair</td>
<td>USAID, World Bank</td>
<td>23.6</td>
</tr>
<tr>
<td>Border Crossings Infrastructure</td>
<td>Japan (JICA), EC</td>
<td>3.6</td>
</tr>
<tr>
<td>Gaza International Airport</td>
<td>Saudi Arabia, Germany, the Netherlands, (loans from Spain and Egyptian Banks)</td>
<td>86.5</td>
</tr>
<tr>
<td>Gaza Sea Port</td>
<td>France, the Netherlands, EIB and the PA\textsuperscript{43}</td>
<td>5.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>336.7</strong></td>
</tr>
</tbody>
</table>

\textsuperscript{43} Commitment was about US$80 million but only US$5.4 was disbursed.

2.8 Summary of the Key Issues in the Transport Sector

Seven key issues that need to be addressed in the transport sector have been identified. The gravity of these issues may to a considerable extent be explained by the closure regime, and the inability of the PA to take proper action because of its poor economic position resulting there from. Indeed very little resources have been available in recent years for financing the transport sector beyond the operations of the ministries as shown in previous sections. It is important to emphasise that none of these issues will be solved solely by a
reduction in the severity of the closure regime; they need to be addressed seriously by the PA and allocate the necessary, or at least minimal resources to trigger donors funding. There are further details in the annexes.

**The Road Network being Destroyed:** Based on recent estimates carried out by Ministry of Public Works and Housing (MPWH)\(^{44}\), it was found that almost 50 percent of the road network is in poor, very poor or failed condition, and hence beyond economic repair. This has been caused by an under-funding of regular maintenance over many years as well as damages caused by the Israeli military since the last Intifada, and this in spite of donor assistance to the road sector to the tune of US$240 million over 13 year period since 1994. The damages, estimated at US$130 million \(^{45}\), and past under funding of repairs and maintenance have caused an erosion of road assets, now manifesting itself in an accumulation or backlog of deferred maintenance. This is not a sustainable situation, and the only way to address this imbalance is through extensive rehabilitation or reconstruction of road pavements to restore the asset value in combination with regular maintenance of the rest of the network to prevent further erosion of road assets.

**Restricted Movement and Access in the West Bank:** Overall the road network in the West Bank and Gaza is somewhat developed but with one of the lower densities when compared with neighbouring countries. However, there are several areas which have inadequate access to markets, social services and employment, mainly outlying agricultural areas, where poverty may be even higher than on average. The situation of these areas may often have worsened in recent years on account of the Israeli closure regime. Also, in rural areas with road access, the roads are narrow with poor alignment causing accidents and inadequate and costly provision of public transport services. Moreover the general level of access between several of the urban areas on the West Bank has worsened on account of restrictions on Palestinian use of some Israeli roads built on the West Bank, and that Palestinians travelling between the northern and southern parts of the West Bank cannot use roads through Jerusalem. The existing bypass road is long and of low quality. Intercity travel is also affected by that through traffic often has to move on roads through urban areas.

**Land-locked WBG with Very Poor Access to International Transport Network:** Although WBG is located reasonably close to major markets in Europe and the Middle East it has exceptionally poor access to the international transport markets. There are several reasons including the land-locked nature of the territories. Although there is a 40 km coastline along the Mediterranean, WBG is primarily dependent on Israel for overseas imports and exports, and whilst imports and exports through Israel is facilitated by way of what is termed a quasi customs union, access to Palestinian shippers is complicated by procedures and obstacles en route to these ports and by increased costs. Palestinian shippers can also access international shipping routes through Jordan and Egypt, but accessing these routes also entails going through Israeli controlled border crossings\(^ {46}\). The situation of WBG is also unique in a worldwide perspective in that it at present does not have direct access to the international air transport system, following the closure and partial destruction of the

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\(^{44}\) As reported by Universal Group report (2007)
\(^{45}\) MPWH Estimates of Damage to buildings and roads as of January, 31 2006
\(^{46}\) Although Israel in fact is no longer present at the Rafah border crossing, the GOI effectively imposes closure on this border crossing at will by preventing EUBAM monitors from accessing the terminal.
Gaza International Airport (GIA) in the early 2000s\(^{47}\), and that its territory is divided into two pieces of land without direct connection. Whilst these obstacles can in principle be bridged, the current situation, as aggravated by the Israeli closure regime, makes not only international trade very expensive; it makes it virtually impossible for the WBG to effectively participate in the world market as a means to build welfare for its citizens.

**Disarrayed Public Transport:** Public transport in WBG is performed by privately owned buses, shared taxis and taxis. The supply has been regulated by a traditional system with roots many years back in history. Both supply and prices are regulated by established principles. However, the regulatory system which previously functioned reasonably well is now in disarray on account of developments since 2000. There are several contributing factors many of which have its roots in measures taken by the Israelis, including the closure and movement restriction regime and the resultant delays at checkpoints; the loss of direct access from north to south through Jerusalem especially with the inadequate bypass alternative. Moreover, the poor condition of the road network is causing significant increase in operational and maintenance cost. As a consequence the traditional bus system, which served the major towns on the West Bank, is not functioning as it used to. Moreover on account of pressure on the authorities, many permits for taxis and shared taxis have been issued (and in excess of the traditional rules) in recent years, and there is therefore likely to be an oversupply in the sector, which is aggravated by that many operators do not have permits. The current situation is not stable, and some operators will likely go out of operation.

**Poor Road Traffic Safety Record:** The road safety situation in WBG is a grave concern. Measured in terms of the fatality rate i.e. the annual number of fatalities per 10,000 vehicles, WBG ranks with countries in Southern Africa, whilst being a somewhat better performer than counties in Western Africa. In comparison with countries in North Western Europe, the fatality rate in WBG is about 10 times worse. The fatality rate is somewhat higher in the Gaza Strip than on the West Bank. On average during the 7 last years, the rate has been about 13, with a peak reached in 2005 at almost 18 fatalities per 10,000 vehicles. The sharp variations in the data on accidents during the period 1999-2005 suggest that the dramatic changes in the political circumstances affect accidents, reporting and statistics collection. The PA has at present no comprehensive plan for how to tackle the road safety crisis. The closure regime also in a significant way impacts on the ability of the authorities to enforce the traffic law. As in many other countries, the poor road traffic safety record can thus likely primarily be explained by the fact that the enforcement system is not credible or that enforcement actions are far too limited.

**Unclear, and Confused Responsibilities for Transport in PA:** The PA is a young government and it has also been supported heavily and hence influenced by donors. As a consequence responsibilities for transport are confused at present, and this may come to serve as a drag on future efforts to drive development including by way of the revival of the transport sector. The greatest challenge is the current situation as concerns the roads sector. The MPWH is responsible for the maintenance of the public road network, whilst the Palestinian Economic Council for Reconstruction and Development (PECDAR), originally set up in 1993 to facilitate implementation of donor-financed projects, still is

\(^{47}\) The estimated damage to GIA was US$28 million
involved in, *inter alia*, road development and rehabilitation projects. The Ministry of Transport also has a mandate to perform road management functions, albeit has not performed any such functions so far. In addition, the Civil Administration of the Israeli Ministry of Defence has a major role in this sector in terms of the Oslo Agreement, whilst the Ministry of Agriculture (MOA) manages rural roads. To this should be added that several ministries have mandates in the sphere of planning, in particular as concerns mid to long term planning, including in the road sector.

**Weak PA’s Management Capacity of the Transport Sector:** The overall political circumstances as well as the pressure to deliver hardware (e.g. infrastructure) as quickly as possible, have prevented the PA to attend to the proper development of its own organisation and capability to manage, plan and deliver both hardware and software required for the proper functioning of the transport sector. This manifests itself in several ways e.g. a complete lack of formulated policies for the transport sector, inadequately developed strategies for how to develop the transport sector and poorly developed plans for what to do specifically in order to achieve certain results. The PA is relatively well equipped when it comes to trained staff with good competency, but it lacks the basic instruments required to effectively utilise this resource and to manage the development of the sector.
3 Proposed Strategic Framework for Development of the Transport Sector

3.1 Objective and Assumptions

The main issues in the transport sector are, as described above, very high cost of transport to the people and the economy mainly due to the closure regime and the limited access and mobility, limited institutional planning and management capacity and poor road infrastructure and services.

The objective of the Strategic Framework is to provide the PA with a Strategy and Action Plan to address the above issues and to revive the transport sector in order for the sector to contribute to economic growth in WBG. The Strategic Framework is formulated from the PA’s perspective and has been confirmed through a stakeholder workshop held in Jerusalem on May 10, 2007. The underlying assumption is that to succeed the PA must take charge, and to be able to do so it must have a strategy of its own; the Strategic Framework is thus seen as a possible example of the kind of management tool that the PA must avail itself of to be able to manage the revival of the transport sector. Diagram 1 below shows the preparation process of the Strategic Framework.

In developing the Strategic Framework, there are three overarching considerations or constraints that must be taken into account. The first is the Israeli restrictions on movement and access. The extent to which these restrictions limit the PA’s ability to develop and manage transport systems and infrastructure, and on a deeper level the extent to which they preclude any opportunity for economic growth, is central to the development of a strategy for this sector. A comprehensive transport sector strategy cannot in fact be envisaged under the current restrictions and closure regime, therefore assumptions must be made that these restrictions will be lifted significantly.

The second main consideration is the institutional capacity and stability of the PA. Given the current political and fiscal challenges it faces, the PA will in the short-term be committed to ensuring the stability and continuity of its institutions. By implication, the PA will initially, i.e. in the short term, commit to focus on strengthening its institutional capacity. This will enable the management and implementation of immediate/short and medium to longer term priority programs, but also will have its own management and strategic capacity to face difficult situations which may arise as part of the uncertainty that hover the region.

The third main consideration is the current sanctions imposed on the PA and its limited resources available for transport sector development. The proposed Strategic Framework assumes that the sources of income available to the PA will be very limited and can only finance the public sector (the ministries) operation expenditures (payment of staff salaries and related items). Any additional funds that will gradually become available will have to be directed to high priority activities as will be identified further below. As a result, the PA will have to mobilize the donor community, and in a substantial scale, in order to be able to implement the proposed Strategic Framework.
3.2 Targets and Approach

Although it is customary to develop a strategy that is time-bound, this strategy, due to these complicating political factors, is condition-based. The short-term strategy is thus conditioned on a scenario that is likely, although not necessarily to be taken for granted, that the PA has the institutional and political capacity to undertake institutional reforms and infrastructure improvements within its own jurisdiction. As such, the short-term strategy is limited to priorities which are within the PA’s scope of action and can be accomplished within a two year time frame. The second part of the strategy, set in the medium to longer term, would require that movement and access restrictions be significantly improved to an extent that assures revival of economic activity, PA and GOI cooperation resumed and active on transport issues, and the sanctions against the PA lifted. Since it is not possible to predict when this scenario might develop, no specific time frame can be set, but whenever these developments take place, the identified priority actions could be implemented within a three year period. Should a subset of these conditions become a reality, the proposed medium to longer term plan can be evaluated for feasible and beneficial actions under that scenario.

Due to the underlying assumptions that presume very different contexts for each of the short and medium to longer term parts of the strategic framework, different targets for what should be achieved during each of these two phases will have to be formulated. The target for the first phase is to focus on feasible improvements within the PA’s scope for action in specific areas to improve access and reduce costs. An underlying assumption is that by achieving early results, confidence will grow, including in the donor community, and a snowball effect will have been created. Another target should be that the relevant PA institutions should, after 2 years, have in place the basic capacity and instruments required in order to be able to sustain developments during the second phase.

The target for what shall be accomplished at the end of the second phase is broader. As previously mentioned, the completion of the second phase presumes significant progress on movement and access restrictions and PA/GOI cooperation on transport issues. At that time the restoration and clarity of the PA institutions roles and responsibilities in the transport sector should have been substantially accomplished and some of the actions above should have been launched and under implementation. Furthermore, at that time the transport sector should be clearly be seen to be run ‘as a going concern’, although all the building blocks may not be seen to be (fully) in place. The implication is that the transport sector will be functioning reasonably efficiently, thereby supporting economic growth. A further implication is that any donor support thereafter will mainly be directed at capacity and quality development rather than at rehabilitating the transport sector itself.

A dimension of the Strategic Framework is that it aims at identifying the measures that the PA should take in order to achieve the two targets as formulated above. These actions should be identified in light of the strategic focus, i.e. they can be seen to (mainly) belonging to the short or the medium to longer term.

Within the two phases there is also a need for separating between three types of actions to be taken by the PA, including (i) necessary facilitating actions; (ii) institutional capacity
development actions; and (iii) actions required to specifically address the main issues of the transport sector including (a) improving internal mobility and (b) improving connectivity. The sections below contain a presentation of these actions and their justification. All necessary facilitating and capacity development actions belong to the first phase.

Diagram 1: Preparation Process of the Strategic Framework

3.3 Consistency with Palestinian Authority’s Plans in the Transport Sector

Since its inception in 1995, the PA has been keen to develop the Transport Sector and has often identified this sector within its key priority investment plans. This was evident in the determination to build the GIA and the cornerstone of the Gaza Seaport. Other priorities have been in rehabilitating and maintaining of the road network including the emphasis on the need to link the Gaza with the West Bank through the territorial link. These priorities continued to the center of subsequent development plans including the Medium Term Development Plan (MTDP) (2006 – 2008) through its two overarching goals: (i) To address poverty in a sustainable way, by providing a framework to shift PA and donor assistance from emergency relief to job creation, recovery and social and economic development, particularly focusing on the increased participation of women in this process; and (ii) to improve the effectiveness of PA governance by building institutional capacity and accelerating reform.

48 Though its not highly significant but the PA has invested some US$37 million over the last 10 years in road maintenance through MPWH.
49 Palestinian National Authority, Ministry of Planning, Medium Term Development Plan (MTDP), January 2006
To achieve these goals, the MTDP included programs and projects in all sectors, including for the transport sector as priority for national and international financing. The transport projects would aim at improving internal and external access through the rehabilitation and repair of damaged road networks, development of the road network and the development of external links between the WBG and the outside world. To facilitate Palestinian trade and travel and reduce dependency on neighboring facilities, the MTDP stressed the need to repair the GIA and reopen it for operational traffic, and to build the Gaza seaport and make it operational. Moreover, the MTDP recognized that a reform and institutional building program would be an important prerequisite for the development of the sector. This include clarification of roles and responsibilities between various public institutions in the transport sector, development and implementation of necessary laws and regulatory frameworks to provide the right legal environment to promote efficiency in the transport sector and increase its contribution to an effective and efficient market economy, and build capacity in Transport policy and planning formulation. Further, the MTDP aimed to enhance the quality and quantity of the transport system through ensuring efficient and affordable public transport services, adopting safety procedures, regulations and standards. Several of the ideas and proposals of the MTDP have been taken up in this TSN.

3.4 Proposed Immediate/Short Term Actions

3.4.1 Necessary Facilitating Actions – Institutional Pillar

Facilitating actions are measures which do not directly yield benefits for users of the transport sector but necessary for implementing the overall strategic framework.

1. Set-up a National Transport Sector Steering Committee: The main objective of this Committee, led by MOT, is to coordinate the update of transport sector policies, regulations and oversee the implementation of the Strategic Framework. For example, the Committee would initiate work on transport policies. Since its establishment, the PA has failed to prepare a transport policy e.g. in the form of a white paper. The main role of the transport policy is to identify (i) legal requirements and modernization (including in regard to safety, security and environmental requirements); (ii) the border line between the private and public sector in transport; and (iii) the regulatory regime to be applied to the operators in different sub-sectors.

The work done as part of the preparation of this Transport Sector Review and Strategic Framework suggests that the PA needs to identify legal changes and developments required in order to ensure a functional road traffic legal framework. The law actually applied is an Israeli law from before the Oslo Agreement, which is viewed as not appropriate. An attempt to replace it with a new law has stalled. As concerns road transport there is a need to evaluate the scope of deregulation of entry into the market and prices and to introduce a quality control system of operators in lieu. It appears that the road transport industry is in effect already de facto deregulated, but that competition is disturbed by illegal operators often using stolen vehicles. Finally, WBG lacks at present an effective

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50 It is noted that the MOT in 2006 prepared a transport sector development plan. It primarily comprises a list of projects, several of which can be found in the MTDP and in this TSRSN.
legal framework for managing the road sector, which will allow for, inter alia, road classification, the assignment of responsibility for different types of roads (e.g. main roads, rural roads and urban roads) to different entities, and the provision of necessary powers for effective implementation of road works.

It is suggested that the work on the public transport policy be carried out in two phases. The first phase would focus on roads, road traffic and road transport. The second phase would then move on to cover civil aviation, maritime affairs and the role of the private sector. Having a documented transport policy is strategically important in order to identify other actions that the PA will have to take at some time but which cannot be identified at this time, and which will have to feature in future versions of the PA’s transport strategy. It will also facilitate communication with donors.

2. **Unify Road Management under One Ministry**\(^{51}\): The PA needs to address the issue of which ministry or agency that should be responsible for the Road Sector. The current situation – if allowed to continue - will seriously deter donors to become active on a major scale in this sector, the improvement of which plays an important role in the proposed Strategic Framework. The international experience of Road Sector management suggests that all major dimensions of road management, including planning programming, procurement and supervision should be under the control of one management structure. And the reason is that road management is a continuous operation for which accountability is diluted if preparation is done by one organization and implementation by another.\(^{52}\) The unified road management system should be under the MPWH, with consolidated roads functions currently being performed by MOT, MOP and PECDAR. It is proposed that MPWH also assume responsibility for rural roads, currently managed by the MOA.\(^ {53}\) MPWH is an integral part of the PA and the organization with the best competency at present for road management in PA.

3. **Institute a Aid Coordination Mechanism for the Transport Sector**: It is suggested that a *Transport Sector Working Group* be established to meet regularly. The forum would be part of the yet to be launched Infrastructure Strategy Group which is one of the four pillars of the Local Development Forum (LDF) aid coordination structure. The PA should actively engage with the donor community by calling for a meeting to present the Transport Sector Strategy to solicit financial support for its implementation. MOT is envisaged to be chair of this working group, and the donor co-chair would be selected among the active donors.

4. **Build Institutional Capacity to Upgrade the Management Capacity of MOT and MPWH**: The most urgent step to be taken by the PA is to develop its capacity to manage and control the revival of the sector; in other words for the PA to avail itself of the instruments

\(^{51}\) Except for roads located within the local governments (LGs), their development and maintenance should continue to be within the LGs jurisdiction.

\(^{52}\) However, that organisation will normally contract with consultants for services and contractors for performing works.

\(^{53}\) However, see also Section 2.4. MPWH as being responsible for the public road network would normally also be responsible for major urban arteries. However, currently the municipalities are also involved in these roads and it may be appropriate, given the expected workload on MPWH to continue with this division of work for some time. Moreover the final clarification of responsibilities in the road sector may have to await the passing of the new road law, as well as the execution of a road classification study.
required for implementing a Transport Sector Strategy (the Strategy). The MOT and MPWH are therefore in need to develop a *Capacity Development Plan* based on an evaluation of (i) outputs and results to be delivered, (ii) the current organization; (iii) its current human resource management function, and (iv) its current staffing. Such Plan would be among the top priorities for financing.

The PA will also need to regularly update the Strategy to also cover the PA’s financial position in the Transport Sector. The PA’s revenues and expenditures in this sector will need to become fully transparent and financial reporting should ideally also cover the authorities under the MOT (GIA, CAA, PAL and the Seaport Authority). Regular progress reporting for internal and donors use will need to be prepared to build confidence in the institutions and to mobilize additional financial and technical resources.

### 3.4.2 Actions to Improve Mobility – Priority Investments

Two such actions may be identified which would meet the criteria for implementation in the short term, i.e. limited dependence on the GOI and resilience of the system to adverse conditions. They are viewed as important as a means to improve mobility, but also to set strategy implementation in motion in a way that results can be generated that are tangible in the short term. These are referred to as:

- Strengthen Road Traffic and Transport Management
- Rehabilitate and Maintain the Road Network

1. **Strengthen Road Traffic and Transport Management:** This first action will be a responsibility of MOT. Its purpose is to significantly strengthen road traffic law enforcement and enforcement of the road transport regulatory system. Its justification is that an important explanation of the current poor performance of road traffic and transport is to be found in that current laws do not have the necessary regulations to enforce them. The MOT will be expected to make a quick review of current enforcement measures and constraints and adopt the necessary ramifications to stepped-up the enforcement program by the parties concerned. MOT will monitor and report on progress.

2. **Rehabilitate and Maintain the Road Network within the PA’s Jurisdiction:** There is a need to halt the destruction of the existing road capital and to bring it back to a maintainable state. Because of the magnitude of the resources required (approximately US$420 million over 5 years), it will have to be carried out over both phases of the implementation. It is expected to comprise the following five components (further information in Annex 5)

1. Road strengthening; estimated cost for five years: US$100 million
2. Road rehabilitation; estimated cost for five years: US$225 million
3. Routine and periodic maintenance; estimated cost for five years: US$27 million
4. Restoration of gravel roads; rural roads; estimated cost for five years: US$45 million
5. Restoration of low cost sealed roads; rural roads; estimated cost for five years: US$25 million.
MPWH should be responsible for implementing the above action. To implement components 1 and 2, MPWH will, with the help of local consultants quickly develop a priority program. A simplified approach for prioritizing is expected to be used involving measures of traffic (in terms of expected demand), a measure of the severity of the destruction of the road and a measure of its urgency to reduce travel cost and time.

Similarly a program will be prepared by MPWH, in consultation with the MOA in order to prepare components 4 and 5. Component 3 will only be implemented as from the second year of the implementation period, and refers to standard operations of the MPWH in regard to roads that have been put into a maintainable state.

It is expected that MPWH will identify different components that can be implemented using labor-based techniques. Such programs have been implemented previously. Whilst this action as a whole is expected to yield a substantial amount of new work opportunities, the overall impact will be limited as normal road works are fairly machine intensive (the labor component is normally some 15-20 percent of the cost). However smaller repair works can be ideal for labor-based techniques, and will boost the contribution of this action to job creation and poverty alleviation.

It is essential to note that while road rehabilitation is a priority action in the transport sector, such projects sometimes have broader implications in terms of creating alternate roads or accommodating facts on the ground in terms of Israeli restrictions on access to land and roads. Such considerations would have to be reviewed carefully prior to engagement for each road rehabilitation project.

3.5 Proposed Medium to Longer Term Actions to Improve Mobility and Connectivity

The purposes of the medium to longer term actions are to improve both mobility and connectivity. It should be noted that some preparatory work can be initiated during the first (short-term) phase of the Strategic Framework, and that as already discussed, the commencement of the medium-long term phase is condition based and significant progress on movement and access restrictions and PA/GOI cooperation on transport issues. The following actions are included:

- Develop the Road Network
- Road Rehabilitation and maintenance (Continued)
- Develop the West Bank to Gaza Territorial Link
- Repair Damages to the Gaza International Airport
- Construct the Gaza Seaport
- Rehabilitate and Develop Border Crossings

1. Develop the Road Network: As mentioned, several issues have to be addressed with regards to the extent of the road network on the West Bank, including better access to rural areas, actions to mitigate the effects of Israeli roads and restrictions, which should not be
assumed to have been eliminated completely, and roads bypassing urban areas. There may also be a need to improve the capacity of some of the existing roads. The plans for developing the road network have not yet been adequately formulated as yet. It is therefore proposed to address road network development in two steps. The first step, part of the first phase, will comprise the preparation of a road network development plan, to be completed within 1 to 2 years, to then be followed, in the second step, by implementation of recommended actions over a longer period of time. The study is estimated to cost about US$1 million, and preliminary proposals for road network development are estimated at US$195 million.

Once again, and even more so than for short term road rehabilitation work, it would be essential to carefully review these road development and continued road rehabilitation projects in light of possible ramifications on access to land and roads within the West Bank.

2. Road Rehabilitation and Maintenance: Continue the work that was initiated during the short term period since the needs are well beyond the two year implementation, the capacity of the institutions and the funds that the PA can mobilize.

3. Develop the West Bank - Gaza Link: Under the Oslo Accords, GOI guaranteed safe passage of persons, vehicles and goods between the West Bank and Gaza, agreeing that if security measures had to be taken, one safe passage route would remain open at all times. A scheduled convoy system was in fact in place between 1996 till 1998. In December 2004, the Bank pointed out that “an unfettered flow of people and goods between Gaza and the West Bank is needed to link the two territorial elements of the Palestinian economy, and to lay the basis for viable statehood. A functioning link would create a larger effective internal market, help trigger price and income convergence between Gaza and the West Bank and provide a pathway from the economy of the West Bank to a future seaport in Gaza.” The Agreement on Movement and Access addressed this problem through a GOI commitment to begin bus convoys for passengers between Gaza and the West Bank by December 15, 2005, and truck convoys for goods by January 15, 2006. Neither deadline was met, nor are there indications that they will be in the near future. Nonetheless, the convoy system remains the most likely short-term solution.

In the future, independent truck movement in secure corridors could be an option. Independent truck movements offer greater flexibility and can be operated with a reasonable level of security using RFID and time-bound movements. However, in order to provide the required level of security, independent movement would also likely involve containers or secure vans equipped with tamper-proof seals. As such, it would be limited to the larger, full-load shipments in articulated trucks.

From an economic perspective, a permanent link will be necessary to create an integrated economy throughout the West Bank and Gaza. Though a detailed engineering review will

54 These were based on three routes (i) bus and truck convoys from Gaza through Erez to Ramallah through Betounia and visa-a-versa, (b) truck convoys from Gaza through Erez through Bir Nabala to Jordan Valley and (c) bus and truck convoys from Gaza through Erez to Tarqumiya.

55 Stagnation or Revival? Israeli Disengagement and Palestinian Economic Revival,
be needed to analyze the various alternatives to establish the Territorial Link, a quick review would show that assuming the Tarqumiya to Erez route (40km) a dedicated surface (at grade) or sunken road is by far the most cost effective solution to connect the two territories, provided adequate security could be guaranteed.\textsuperscript{56} Furthermore, and according to a World Bank recent review on these issues:

“... the Bank prepared terms of reference for a USAID financed pre-feasibility study of options for a safe, viable, permanent link between the two Palestinian territories. The results of the study are not yet available, but they are likely to confirm the preliminary findings of the World Bank and the findings of an earlier study undertaken by the Israeli government\textsuperscript{57} which suggests that a road option (either sunken or at grade) is the preferable one, with a rail connection the second-best (although dependence on the existing Israeli rail network could greatly impact its reliability). It is expected that any tunnel option would be prohibitively expensive, technically difficult and time-consuming to construct, and the most prone of all options to catastrophic sabotage.”\textsuperscript{58}

The aim should be to have feasibility studies ready to inform decision makers should the territorial link be negotiated, but in the meantime it is recommended that efforts continue to be made to establish a secured convoy system.

4. Reconstruct and Repair the Gaza International Airport (GIA): Reconstruction of GIA will be advisable only once there is Israeli agreement to its resumption of operations. Despite the GOI’s recognition in the AMA of importance of the airport and willingness to continue discussions, and the precedent of third party involvement at Rafah which could present new possibilities for resuming operations at both the airport and seaport, there has been no progress on this issue. Once such a commitment to allow resumption of operations is secured, a detailed plan with costs for the rehabilitation of the airport will be necessary. There will also be a need to review fully the implications of financial commitments already made as part of the original construction of the GIA. Moreover, there will be a need to review the financial implications for the PA of not only the operations of the GIA but also of the Palestinian Airlines.

The following will be required in order to implement the action:

1. Mobilization of a consultant to prepare and cost a detailed rehabilitation program;
2. Definition of requirements for operational improvements of the airports, including capacity building of airport management;
3. Financing, management and implementation of rehabilitation program;
4. Implementation of a capacity development program.

The two first components can be implemented in the short term, whilst the other two components could only be implemented as part of the conditional medium to longer term plan.

\textsuperscript{56} Road vs. Rail, World Bank Technical Team, June 19 2005.
\textsuperscript{57} Examining Safe Passage Options between Gaza and Hebron, Israeli Ministry of Regional Cooperation, 2001.
\textsuperscript{58} An Update on Palestinian Movement, Access, and Trade in the West Bank and Gaza”, August 15, 2006.
5. **Construct the Gaza Seaport:** Improving access by sea for WBG is viewed a vital element of the strategy to secure access to international markets. However, a number of considerations suggest that the old plans for how to accomplish this should be reassessed in light of the absence of dialogue between the two parties (Israel and the PA).

The AMA states that: “Construction of a seaport can commence. The GoI will undertake to assure donors that it will not interfere with operation of the port. The parties will establish a U.S.-led tripartite committee to develop security and other relevant arrangements for the port prior to its opening. The 3rd party model to be used at Rafah will provide the basis for this work.” According to a World Bank report on these issues in 2006, the Bank’s view is that “while a “Deep Sea Port” option would remain for the medium to longer term, the port should be developed in a modular fashion, taking into account the potential for using alternative sea routes via Egypt, and beginning with a simple roll on, roll off (RoRo) pier. This could accelerate the port’s opening (possible within two years) and to avoid over-sizing it before obtaining a good sense of actual demand.”

There is also a need to review if such a ramp could also be used for passenger operations. As of the time of writing there has been no appreciable progress on the port. Furthermore, and while the MOT officials disagree, on account of the evacuation of Israeli settlements in 2005, it is possible to consider other locations of the port than what was possible before.

The following Actions are therefore proposed which should be lead by the Steering Committee is responsible for this action

1. Finalization of the feasibility study and conceptual design including bidding documents in light of an interim solution, and to review requirements for implementation, including legal framework and capacity for operations; and
2. Financing arrangements and implementation of the recommended first phase.

6. **Rehabilitate and Develop Border Crossings:** As stated, the Bank has undertaken a number of separate reports on movement and access issues and trade facilitation. These documents provide extensive analysis of crossings and the issues constraining trade through these terminals, particularly Karni and Rafah, and should be referred to for a more thorough discussion of the issues that will be addressed here.

**WBG - Israel**

Due to the high dependence of WBG on Israel as a market and supplier of goods, the reliability and efficiency of the crossings between WBG and Israel are critical. Karni in particular has been the focus of extensive efforts to improve performance, reliability, and security. The United States Security Coordinator (USSC) General Dayton team has undertaken a security improvement project on the Palestinian side of Karni and is also engaging in infrastructure and systems improvements.

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For the West Bank, there has been little work done on evaluating existing crossings and determining future needs. The crossings currently operating or under construction are the result of Israeli planning and execution, with little or no Palestinian input, and for the most part are complete. While Karni and other crossings could benefit from infrastructure improvements, infrastructure is not the constraint or primary cause of inefficiencies at Karni, while for West Bank crossings it would be difficult to estimate infrastructure development needs prior to studying the needs at the terminals. There are current plans to improve infrastructure on the Palestinian side at Karni, and prior to the implementation and assessment of the results of those infrastructure improvements, and the preparation of a preliminary study for needs at the West Bank crossings, it is the Bank’s view that no further infrastructure projects at WBG-Israel terminals should be undertaken.

Gaza - Egypt
The AMA provided for the operation of Rafah as a Palestinian-Egyptian border crossing for both passengers and exports to Egypt. Although the operation of the crossing has become marred in recent months, the experience of Rafah as a passenger border terminal was extremely positive until the disruption caused by the kidnapping of an Israeli soldier near the Gazan border and the subsequent closure of the Rafah crossing by GOI. Prior to the closure, the crossing’s performance represented a dramatic improvement over the period of Israeli control.

Infrastructure improvements at Rafah have been undertaken with EC funding, and continue to be assessed today by a team of IMG engineers working at the terminal. Given the history of inappropriately designed physical infrastructure given the actual needs at the Israeli-Palestinian crossings, it was agreed that these same mistakes should be avoided on the Palestinian-Egypt border. However, since enabling commercial trade through the terminal necessitates a secure and separate area, at the very least it will be necessary to prepare a secure customs area where the cargo transfer could take place. This could be created quickly with light construction such as secure fencing to separate the passenger and cargo operations at the terminal. As soon as possible, it would also be beneficial to reconfigure of the entry and exit points in order to ease the flow of cargo trucks. Further improvements could be put in place over time as operations expanded.

West Bank – Jordan
Little work has been done to evaluate the performance or needs at the West Bank crossings with Jordan. Currently only Allenby crossing is operational; the Damieh bridge crossing which was used for commercial purposes was shut down by the GOI in 2005.

The PA currently has no control over these border crossings or presence at the actual terminals, although the GACB does manage a pre-passenger terminal at Allenby where Palestinian passengers are processed prior to departure and after arrival. An assessment of infrastructure needs at Allenby terminal, not to mention Damieh bridge, would first

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61 The locations of these crossings is also cause of disagreement since some of them are not on the 1967 borders but rather within the West Bank.
62 Based on observations from a recent World Bank Aid Memoire on the Rafah border crossing, June 2007.
necessitate a preliminary needs assessment as well as significant assumptions in terms of the PA role vis-à-vis operations at these terminals.

3.6 Summary: The Proposed Action Plan

The actions of the Strategic Framework are summarized in Table 5 below. It indicates which ministry that is envisaged to be responsible as well as the priority of the action. Note, however, that actions belonging to the medium to longer term phase may require preparatory work already during the short term.

Table 5: Proposed Action Plan

<table>
<thead>
<tr>
<th>Action</th>
<th>Priority</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Short-Term: Necessary Facilitating Actions – Institutional Pillar</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Set-up a National Transport Sector Steering Committee</td>
<td>X</td>
<td>MOT</td>
</tr>
<tr>
<td>2 Unify Road Management under One Ministry</td>
<td>X</td>
<td>National Steering Committee</td>
</tr>
<tr>
<td>3 Institute a Transport Sector Working Group within the framework of the Local Development Forum for aid coordination in the Transport Sector. Call on a meeting to present the Transport Sector Strategy.</td>
<td>X</td>
<td>MOT</td>
</tr>
<tr>
<td>4 Build Institutional Capacity to Upgrade the Management Capacity of MOT and MPWH</td>
<td>X</td>
<td>MOT/MPWH</td>
</tr>
<tr>
<td><strong>Actions to Improve Mobility – Priority Investments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Strengthen Road Traffic and Transport Management</td>
<td>X</td>
<td>MOT</td>
</tr>
<tr>
<td>2 Rehabilitate and Maintain the Road Network within the PA’s Jurisdiction</td>
<td>X</td>
<td>MPWH</td>
</tr>
<tr>
<td><strong>Medium to Longer -Term: Improve Mobility and Connectivity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Develop the Road Network within the PA’s Jurisdiction</td>
<td>X</td>
<td>MPWH</td>
</tr>
<tr>
<td>2 Rehabilitate and Maintain the Road Network (Cont’d)</td>
<td>X</td>
<td>MPWH</td>
</tr>
<tr>
<td>3 Develop the West Bank - Gaza Territorial Link</td>
<td>X</td>
<td>National Steering Committee</td>
</tr>
<tr>
<td>4 Reconstruct and Repair Gaza International Airport</td>
<td>X</td>
<td>MOT</td>
</tr>
<tr>
<td>5 Construct a Gaza Seaport</td>
<td>X</td>
<td>National Steering Committee</td>
</tr>
<tr>
<td>6 Rehabilitate and Develop Border Crossings</td>
<td>X</td>
<td>GACB/MPWH</td>
</tr>
</tbody>
</table>
4. Financing of the Proposed Strategic Framework

4.1 Assumptions

To finance the implementation of the Action Plan of the Strategic Framework, the PA will have to mobilize the donor community for support, and the required steps have been outlined as part of the Strategic Framework. It is assumed that most of the incremental costs of the Action Plan can be supported by the donor community if adequate reform actions are taken by the PA. It would have been preferred that the PA’s contribution is directed primarily towards the financing of ordinary and periodic road maintenance; during the five year time frame, a total cost estimated at US$27 million, however, this may not be achievable with the current PA’s fiscal distress and constraints. As a result, and due to its urgency, such investments will be sought from the donor community.

To approach the donor community, the PA will have to translate actions into projects in a format that would meet donor requirements and which would also ensure effective use of donor and PA resources. A possible project structure fulfilling these requirements is set out in Table 6. As can be seen from the table a distinction is made between three types of programs; each program attempts to address key issues, as identified above, which are of a similar nature in terms of expected outcomes. The programs are as follows:

- Improving Institutional and Overall Sector Management Capacity
- Improving Internal Mobility
- Improving Connectivity

All construction projects are expected to yield high economic returns, thereby contributing to economic growth. For certain projects there is a need to ensure that they are designed appropriately to ensure adequate economic benefits. In those cases the proposed projects will comprise a preparatory phase. By supporting economic recovery and growth, the projects will also contribute to alleviate poverty. Moreover, and since most of the projects involve capital works, they are also expected to directly offer much needed employment opportunities.

With regards to the three proposed technical assistance projects the following should be mentioned: The Technical Assistance for Capacity Development to MOT is expected to assist with addressing three issues: (i) further development and management of the transport sector strategy; (ii) the formulation and implementation of a transport policy, in two phases; and (iii) the development and implementation of a capacity development plan for MOT. These projects are expected to last for the entire 5-year period and the services should ideally be provided by one contractor.

The Technical Assistance to MPWH for Developing Road Network Management Capacity will assist MPWH to develop and implement the capacity development plan for the road sector. It is also envisaged to cover a 5-year period, and again the services should ideally be provided by one contractor. This technical assistance could be structured as a twinning arrangement between MPWH and a reputable road administration from another country. The third proposed technical assistance project, Strengthening Road Traffic and Transport Management, would assist MOT to implement the crash program to strengthen road traffic and transport enforcement. This technical assistance is also proposed to include a
component with the purpose of identifying and financing critical equipment and facilities required to ensure effective law enforcement. There are outline terms of references (TORs) for these three technical assistance projects in Annex 7.

### 4.2 The Proposed Investment Program

The proposed investment program is summarized in Table 6 below. The costs in the table are indicative and have to be confirmed by the further analysis as recommended. Note that for several of the projects, with medium to longer term priority, costs are expected to be incurred also in the short term. This refers to preparatory work that could, given favourable conditions, be initiated already during the short term of the time frame of Strategic framework.

**Table 6: Proposed Institutional Development and Investment Program**

<table>
<thead>
<tr>
<th>No.</th>
<th>Program/Project</th>
<th>Estimated Investment (US$M)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Immediate to Short-Term (two years)</td>
</tr>
<tr>
<td>A.</td>
<td><strong>Improving Institutional Capacity and Overall Sector Management</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Strengthening Institutional Capacity for Policy and Planning, and Overall Sector Management (Technical Assistance to MOT)</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>Strengthening Road Network Management (Technical Assistance to MPWH)</td>
<td>2</td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>B.</td>
<td><strong>Improving Internal Mobility</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Strengthen Road Traffic and Transport Management (Technical Assistance to MOT)</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Road Network Rehabilitation and Maintenance(^{63})</td>
<td>100</td>
</tr>
<tr>
<td>3.</td>
<td>Road Network Development (Technical Assistance to MPWH)</td>
<td>2(^{64})</td>
</tr>
<tr>
<td>4.</td>
<td>West Bank – Gaza Territorial Link Development</td>
<td>2</td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td><strong>105</strong></td>
</tr>
<tr>
<td>C.</td>
<td><strong>Improving Connectivity</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Damage Repair of Gaza International Airport</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Construction of Gaza Seaport</td>
<td>3(^{66})</td>
</tr>
<tr>
<td>3.</td>
<td>Rehabilitation/Development of Border Crossings</td>
<td>2(^{67})</td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td></td>
<td><strong>117</strong></td>
</tr>
</tbody>
</table>

\(^{63}\) Annual Road Maintenance costs are included in the amount of US$27 million for 5 years.

\(^{64}\) Development of national road master plan

\(^{65}\) Rough estimate of construction cost of new roads

\(^{66}\) Preparation of feasibility study, conceptual designs, detailed designs and tender documents for a deep-sea seaport

\(^{67}\) Preparation of Needs Assessment, conceptual designs, detailed designs and tender documents
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25. The World Bank, Movement and Access Restriction in the West Bank and Gaza: Uncertainty and Inefficiency in the Palestinian Economy, May 9, 2007
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Annexes

Annex 1: Poverty in the West Bank and Gaza
Annex 2: Government Structure in the Transport Sector
Annex 3: Road Traffic and Transport
Annex 4: Volumes of International Transport and Trade
Annex 5: The Road Sector
Annex 6: The Fixed Territorial Link between Gaza and the West Bank, the Gaza International Airport and the Seaport in Gaza
Annex 7: Proposed Technical Assistance Projects
Annex 8: Summaries of Donors Financed Projects in the Transport Sector
Annex 9: References that this Review Study Benefited From
Annex 1: Poverty in the West Bank and Gaza

1. Poverty and Unemployment in the Palestinian Territories

There are various definitions of poverty. However, poverty is more accurately measured on the basis of individual or household expenditures and consumption (rather than income), which better reflect needs (UNRWA, November 2006). The average household monthly consumption in the WBG over the past six years is presented in Annex Table 1.

2. Consumption and Expenditures

Based on information presented in Annex Table 2, the average Palestinian household consumed an average of US$847 in goods and services per month in the four years of the survey. Of this amount, food accounted for an average of about 34 percent of all consumption, housing accounted for about 24 percent, and transportation and communications for about 10.5 percent. With an average household of 6.75 persons, per capita monthly consumption was an average of US$125 - about US$4.15 per person per day. Average per capita daily consumption was, therefore, about twice that of the deep poor level set by PCBS.

Average monthly household food consumption was 11 percent below its 1998 level. Non-food consumption was 9 percent greater, accounted for mainly by greater estimated housing costs, which weigh more heavily in the non-food consumption budget.

Annex Table 1: Summary of Household Expenditures in the WBG in US$ (1998-2005)

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>2001</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Consumption</td>
<td>322.5</td>
<td>273.0</td>
<td>282.7</td>
<td>291.8</td>
</tr>
<tr>
<td>Non-Food Consumption</td>
<td>523.1</td>
<td>568.5</td>
<td>546.8</td>
<td>583.0</td>
</tr>
<tr>
<td>Transport and Comm</td>
<td>78.3</td>
<td>86.4</td>
<td>91.3</td>
<td>109.7</td>
</tr>
<tr>
<td>Total Household Expenditures</td>
<td>845.6</td>
<td>841.5</td>
<td>829.6</td>
<td>874.8</td>
</tr>
</tbody>
</table>

Source: UNRWA 2006

3. Poverty Rate

Surveys showed that while the total WBG population grew by some 30 percent between 1998 and 2005, the number of Palestinians in poverty grew at more than three times that rate despite significant amounts of emergency and humanitarian assistance provided during the 2001-2005 period. There were an estimated 1.3 million persons in 170,000 households living below the official poverty line in 2005 (nearly double the number in 1998) (see Annex Table 3). Most of the poor (820,000 persons in 104,000 households) also lived in deep poverty (UNRWA 2006).

Among those living under the official poverty line in 2005 were 623,200 refugees in some 81,350 households while deep poverty afflicted more than 406,000 refugees in 51,500 households in the WBG. While refugee poverty was not measured in the 1998 surveys,
data for subsequent years indicate that a disproportionate share of the poor and poor households was accounted for by refugees (UNRWA 2006).


<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>2001</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Official Poverty Rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Persons</td>
<td>23.2</td>
<td>33.64</td>
<td>30.60</td>
<td>34.75</td>
</tr>
<tr>
<td>Refugees</td>
<td>N/A</td>
<td>41.11</td>
<td>33.58</td>
<td>40.10</td>
</tr>
<tr>
<td>All Households</td>
<td>20.29</td>
<td>27.87</td>
<td>25.60</td>
<td>29.49</td>
</tr>
<tr>
<td>Refugee Households</td>
<td>N/A</td>
<td>33.88</td>
<td>28.97</td>
<td>34.30</td>
</tr>
<tr>
<td><strong>Deep Poverty Rates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Persons</td>
<td>14.51</td>
<td>24.14</td>
<td>20.31</td>
<td>21.80</td>
</tr>
<tr>
<td>Refugees</td>
<td>N/A</td>
<td>31.39</td>
<td>21.72</td>
<td>26.13</td>
</tr>
<tr>
<td>All Households</td>
<td>12.54</td>
<td>19.50</td>
<td>16.41</td>
<td>18.06</td>
</tr>
<tr>
<td>Refugee Households</td>
<td>N/A</td>
<td>25.22</td>
<td>18.51</td>
<td>21.73</td>
</tr>
</tbody>
</table>

The definition of official poverty and deep poverty rates are as per the PCBS.
Source: Prolonged Crisis in the Occupied Palestinian Territory: Recent Socio-Economic Impacts on Refugees and Non-Refugees, by UNRWA, November 2006

The evolution of extreme poverty cases in the first half of 2006 is presented in Annex Figure 1. The highest increase in the hardship cases have been witnessed in cities where the percentage of households living in extreme poverty had increased from 17% in March to 31% in June 2006, an increase of 14%. Meanwhile, village residents living at the hardship case level slightly decreased in April by 6% from that of March but managed to increase to 31% in May and only increased by 1% in June. Refugee camp residents living at the extreme poverty level remained steady in terms of increasing from the month of March to June.

Annex Figure 1: Evolution of Extreme Poverty According to the Area of Residence.
At the end of 2005, 72 percent of Gazan households indicated that they needed assistance, while 54.7 percent of the households actually received aid. In addition, 64 percent of the families reported at the end of 2005 that they had lost more than half of their income during the past three months, of which 33 percent indicated losing more than 75 percent of their income. In Gaza Strip, shops and supermarkets are suspending credit to PA employees, who didn’t receive their salaries for consecutive months (FAO, Food Security Brief, No. 1, July 2006).

4. Increasing unemployment and very limited creation of local jobs

The unemployment rate has substantially increased immediately after the start of the Intifada: it rose from 16 percent in the third quarter of 2000 (27 percent in relaxed definition) to 34 percent in the fourth quarter (51 percent in relaxed definition).

Over the last five years, the domestic economy in Gaza has created 23,413 jobs in services and trade, out of which 58 percent in the public sector. The private sector mostly created small-scale enterprises and self-employment in commerce and services (i.e., low-skilled jobs with limited potential), which is an evidence of a growing ‘informalization’ of the economy. Productive sectors - industry, agriculture and construction - have lost 19,284 jobs.

Since the outbreak of the latest Intifada in September 2000, Israel has significantly tightened its policy of issuing work permits to Palestinians in Israel, contributing to higher levels of already high unemployment and depriving a significant portion of the WBG population of income. Furthermore, external closures, including through separation barrier, have reduced the number of days worked in Israel or prevented employment opportunities in Israel, further suppressing Palestinian workers’ income.

The loss of access to Israeli labor markets significantly reduced Palestinian workers’ incomes, which - despite growing in May 2004 - stood at 36 percent of their 2000 level. Assuming that the share of “Israeli” employment in total WBG employment at the level regressed in 1999-2000 remained unchanged in May 2001, employment in Israel could have amounted to 165 thousand and earnings to US$922 million in 2005, rather than 63 thousand and US$351 million, respectively. The difference in lost remittances from
employment in Israel in 2005 amounted to US$571 million. In total, because of permit restrictions, the total workers’ earnings from work in Israel were US$2.4 billion lower over May 2001 than hypothetical remittances, assuming the level of employment determined by the share of this employment in total WBG in 1999–2000 (The World Bank, West Bank and Gaza Country Economic Memorandum, September 2006).

The loss of jobs in Israel and in the local private sector have led the new unemployed to join family business and family-based agriculture activities, or to alternatively work on their own (as self-employed) in petty trade and other low skilled activities. Simultaneously, the contribution of the employers and the private sector paid workers - the generators of the value added in the economy - to total employment has decreased. The private sector capacity to employ has substantially declined: in Gaza, the number of persons employed in the private sector has on average decreased by 75 percent, while its contribution to the total local employment decreased by 47 percent.

The increased cost of, and expenditure on, transportation in the West Bank is contributing to the increased poverty level (Poverty rate was 31% in 2000, 50% in 2001-2004, and 43% in 2005; Source: The World Bank, The Palestinian Economy and Prospects for Recovery, 2005). At the same time, transportation can be a primary tool to alleviate poverty and improve economic conditions of the country. Therefore, eliminating road and travel impediments, and investment in transportation are keys to resolving this issue.

In conclusion, all these road closures and travel restrictions, accompanied by the depressed economic conditions, had severed impacts on the livelihood of the Palestinians in general. These measures have increased travel expenses, and transportation has become less affordable, especially for the low income groups who were the most hardly hit by this crisis. In addition, these measures fragmented communities and isolates residents from social support networks. Furthermore, the social ties and relationships are weakened.

Annex Table 3: Basic Transport Related Expenditures Indicators in the West Bank

<table>
<thead>
<tr>
<th>Period</th>
<th>Transport Related Household Expenditure (% per month)(1)</th>
<th>Average Household Expenditure (US$ per month)(1)</th>
<th>Unemployment (%)(1)</th>
<th>Travel Time (% Increase compared to year 2000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-2000</td>
<td>11**</td>
<td>845</td>
<td>14</td>
<td>-</td>
</tr>
<tr>
<td>2001</td>
<td>10.8**</td>
<td>841</td>
<td>23</td>
<td>Up to %325 (2)</td>
</tr>
<tr>
<td>2004</td>
<td>8.4</td>
<td>823</td>
<td>26</td>
<td>N/A</td>
</tr>
<tr>
<td>2005</td>
<td>9.3</td>
<td>875</td>
<td>28</td>
<td>%243 (3)</td>
</tr>
</tbody>
</table>

* Approximate values over the years
** This value includes transportation and communication, as they were not separated.
(2) Source: Awartani, 2001
(3) Source: An-Najah National University, 2005
Annex Table 4: Comparison of Travel Time and Cost Before and After the Intifada

<table>
<thead>
<tr>
<th>Trip Route (Origin-Destination)</th>
<th>Travel Cost (NIS)*</th>
<th>Travel Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nablus – Jenin</td>
<td>8</td>
<td>23</td>
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</tr>
<tr>
<td>Jerusalem – Hebron (Hebron Residents)**</td>
<td>8</td>
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</tr>
</tbody>
</table>

* Each one US dollar is currently equivalent to 4.3 New Israeli Shekel (NIS)
** Jerusalem residents have access to shorter routes that are not accessible to other West Bank residents.

Annex Map 1: Poverty and Unemployment Maps in West Bank & Gaza Strip and Palestinian Territory as of 2004

- First, unless the Palestinian territories are able to achieve high levels of economic growth, the prospects for future poverty reduction are not encouraging. Not only will the number of poor Palestinians grow rapidly, but their share in the population will also increase, which could become a socially destabilizing factor.
- Second, unless Palestinians gain greater access to internal and external markets and to better paying jobs, whether in Israel or in higher productivity occupations in the WBG,
it will be difficult for them to escape poverty. Presently, the majority of poor Palestinians live in households headed by working adults in low-paying jobs that do not provide sufficient income to raise their families to a minimally acceptable standard of living.

*UNRWA, Prolonged Crisis in the Occupied Palestinian Territory: Recent Socio-Economic Impacts on Refugees and Non-Refugees, November 2006*
Annex Map 2: Poverty and Unemployment Maps in West Bank & Gaza Strip and Palestinian Territory in 2005 & 6
Annex 2: Government Structure in the Transport Sector

1. Introduction
The first government institution to be established by the PA was the Palestinian Economic Council for Development and Reconstruction (PECDAR). It was created in order to manage foreign-assisted projects. After thirteen years of establishment of PECDAR, it is still playing a significant role in the development and construction of the transportation sector.

Since the formation of the Palestinian Cabinet in 1994, five ministries have responsibilities in the transport sector:

- Ministry of Transport (MOT)
- Ministry of Public Works and Housing (MPWH)
- Ministry of Planning (MOP)
- Ministry of Local Governments (MOLG)
- Ministry of Agriculture (MOA)

2. The Ministry of Transport
MOT’s major role is defining sector policy. Its vision calls for sustainable and seamless inter-modal transportation systems that effectively ties the Palestinian areas together and link them to the world. Its responsibilities include sector organization and management, public transport administration, driver and vehicle licensing, road traffic, traffic safety, and roads and projects. It is also responsible for all aspects related to civil aviation, airports and seaports. In addition, the ministry maintains a databank with information about the financing of road projects.

The MOT is organized in 9 different general directorates. In addition, there are four other departments or directorates which report directly to the Minister, i.e. the Civil Aviation Authority, the Ports Authority, the Palestinian Airlines, and the Directorate of Meteorology. Annex Figure 2 shows the organization plan of the Ministry.

There are three directorates involved in roads and road traffic and transport. The General Directorate for Road Transport manages economic regulation of road transport. The General Directorate for Engineering and Traffic Safety is responsible for road safety management. Both of these Directorates have two branches, one in the West Bank and another in the Gaza Strip.

The third technical directorate is the General Directorate for Roads and Projects, which is under development. Four departments are planned to be established, one for planning and studies, a second for design, a third for operations and supervision, and a fourth for traffic engineering. This directorate has no staff at present.
Annex Figure 2: Organizational Structure of the Ministry of Transport
The total number of employees in the Ministry is 180 of which 95 in the West Bank and 85 in the Gaza Strip. Thirty five percent of the employees are engineers, of which 9 percent have graduate degrees.

The MOT adopted a new structural plan, which was approved by the Council of Ministries in September 2004. The plan provides detailed description of assignments for the departments and job description for officials. In addition, the plan states that MOT is to take the lead role in planning and development of the transport sector.

3. Ministry of Public Works and Housing

Its major role is to administer the roadway network, as the Ministry acts as owner of the road assets, except those currently in areas “C”, which are administered by the Israeli authorities and roads that lie within the jurisdiction of the municipalities. It has responsibilities that range from identifying developmental projects and defining project priorities, administering construction of new roads, to managing or performing the rehabilitation and maintenance works of existing roads through its own resources. The MPWH supervises works related to new construction and rehabilitation of roads undertaken by private contractors.

The MPWH technical directorate responsible for roads is called the Directorate General of Roads. This directorate is headed by an engineer acting as the General Director, with two assistants, one for the West Bank and the other for Gaza Strip. There are four Department within the Directorate General of Roads, which include the Roadway Design, Roadway Studies, Traffic Safety and Maintenance, and Tunnels, Bridges and Major Projects. MPWH also has a separate Roads Supervision Department, which is part of the Supervision and Technical Affairs Directorate. The organizational structure of MPWH and the Directorate of Roads are shown in Annex Figures 3 and 4, respectively.

The MPWH main office is in the West Bank and it has a branch in Gaza Strip. In addition, there are six offices in the West Bank and three in Gaza Strip, which mainly follow up the implementation of road projects and perform or supervise maintenance. The total number of staff in the West Bank offices amounts to about 40, while it reaches about 80 in the Gaza Strip. The MPWH has staff with good capabilities and experience in the management and supervision of projects.

4. Ministry of Planning

The MOP prepares Palestinian Development Plans and medium to long term Investment Plans in various sectors. Its role in the transport sector is related to the identification of the mobility and accessibility planning requirements at the national and regional levels, and to define the plans and the framework of projects needed to satisfy these requirements. It also has responsibilities that may be seen to conflict with those of other ministries, e.g. regarding the formulation of transport policies, the administration of a transportation databank on behalf of MOT, and coordination of donor assistance.
Annex Figure 3: Organizational Structure of the Ministry of Public Works and Housing
Annex Figure 4: Organizational Structure of the Directorate of Roads, MPWH
MOP has seven directorates, two of which deal with infrastructure, including transportation planning activities. The first is the Program and Sectors Coordination Directorate, dealing with short-term planning, which comprises a department for roads, border crossings, and housing. The second is the Spatial Planning Directorate, dealing with medium- and long-term planning, which has a department for plan preparation and spatial policies.

5. **Ministry of Local Government (MOLG)**

MLG’s major role is the overall administration of the various aspects related to local governments. Its responsibilities include developing general policies, approving budgets, allocating funds, and developing physical plans for local governments. These local government entities include municipal and village councils, and village project committees. In addition, MLG approves physical plans of road and infrastructure projects, which involve land acquisition outside the boundaries of the local authorities. The responsibilities of the ministry and large municipalities integrate with those of other ministries as related to planning, studies and identification of new projects, and rehabilitation and maintenance.

6. **Ministry of Agriculture (MOA)**

The Ministry of Agriculture is, *inter alia*, responsible for agricultural roads in the Palestinian territories. It defines reviews, identifies priorities, and prepares budgets for agricultural roads projects. The ministry cooperates with other governmental agencies and non-governmental organizations in the planning, financing, and execution of such projects.

7. **Palestinian Economic Council for Development and Reconstruction (PECDAR)**

The role of PECDAR is to manage foreign-assisted projects in various fields and sectors. PECDAR’s Road Division, which is part of the Project Management and Monitoring Office, (i) identifies and programs road projects, especially those which can be classified as emergency and require quick implementation, (ii) seeks and manages funds to develop and rehabilitate the road sector, (iii) administers design and implementation of new road construction and rehabilitation projects, and (iv) implements technical assistance and capacity building activities. Many of these responsibilities are now shared with other ministries such as the MPWH, MOT, and MLG. However, it has to be said that PECDAR, which originally was seen as a transitional arrangement until the other related ministries would be capable of running their operations, by default have extended its operations to an unspecified duration.

PECDAR has two technical departments concerned with road and other infrastructure projects. The first is the Projects’ Management and Monitoring Office, which is the developmental and reconstruction arm of PECDAR. It has sections, which deal with project development, procurement, contract management, project control, and supervision. In the project development section, which deals with the identification of projects and ensures the development of economical and sound engineering designs, there is the road division, with one engineer who is in charge of roads in PECDAR’s main office in the West Bank. There are also three regional offices in the West Bank, and one in Gaza Strip.
primarily dealing with supervision and monitoring the implementation of various projects, including road projects.

The second technical department is called Technical Assistance and Training, which deals with the identification, planning and execution of technical studies, training activities, and development projects. The activities of this department cover the infrastructure fields, especially the transport sector. Lately, this department has been down-sized and become part of the Projects’ Management and Monitoring Office. The total number of employees in the main and regional offices is about 123, with about one hundred in the West Bank and 23 in the Gaza Strip. The share of engineers ranges between 60 to 65 percent of the staff.

8. The General Administration of Crossings and Borders (GACB)

The GACB is responsible for the management, operation, and development of all terminals and crossings. To date, the GACB manages the Palestinian side of Karni/ Al-Montar, Rafah, Erez/ Beit Hanoun, Allenby, Nahal Oz (for fuel), and Sufa/ Sofa (when in use). The GACB has no presence at crossings within or around the West Bank with Israel. The GACB’s authority at the crossings does not extend to customs or revenues, which is managed by the Customs and Revenues Department.

9. The Local Governments (LGs) (municipalities and village councils)

The LGs are responsible for the road network with their immediate jurisdiction. This includes planning, development and maintaining the network.
Annex 3: Road Traffic and Transport

1. Introduction

This annex provides basic information about the regulation of road traffic and road transport as well as about the performance of public transport, including taxi operations, and freight transport by truck. The information is uncertain reflecting the current confused situation as concerns legislation related to road traffic and transport in WBG.

2. Legal Framework

Road traffic and road transport is regulated by the Traffic Law (No. 5 of 2000), which was adopted in September 2000. It has, however, never been put into full operation as much of the required subsidiary legislation (regulations) has not been prepared. It is understood that road traffic is therefore partially still regulated by regulations imposed during the Israeli occupation before the Oslo Agreement 1993.

The implication of the current situation for road transport regulation is unclear. Road transport regulation is covered, in principle by the new Traffic Law, which provides for economic regulation of both entry and prices. However, the system used at present is based on practice that has developed over time, with roots in old laws and regulations from 1929 and 1970 that were applied in the Gaza Strip and 1958 and 1992 that were applied in the West Bank. The MOT is responsible for both road traffic and transport regulation. However, the economic regulation of road haulage is handled by the Ministry of National Economy.

3. Road Traffic

3.1 Registration and licensing of vehicles

All vehicles in the West Bank and Gaza have to be registered and licensed annually by MOT’s Licensing Department. Fees are paid for both registration and licensing which are collected by the MOT. On account of the Intifada the percentage of registered vehicles with a license has been decreasing from about 64% to 58% between 2004 and 2006. Vehicles in East Jerusalem are registered by the Israeli authorities. The DOT issues regulations as to vehicle specifications.

3.2 Driver’s licences

Having a valid driver’s licence is mandatory. The tests are performed by the MOT, but drivers can attend private schools. Drivers of public transport vehicles as well as trucks with permits may have a separate type of licence.

3.3 Vehicle certification

Annual vehicle inspection is mandatory, and a valid certificate is required in order to have the vehicle licence renewed. The vehicle inspection centers belong to the PA but are operated by private companies in terms of a time-bound agreement with the MOT. Vehicles passing the inspection test receive a certificate that should be submitted to the
MOT Licensing Department. Sometime, this process may require several trips between the two entities in order to have the vehicle’s license renewed.

3.4 Registers
The registers for vehicles, licences, certificates were established during the Israeli period. They are fully computerized, and also cover the permits required for public transport operations. The structure allows for decentralised operations from the regional offices of MOT on the West Bank and in Gaza.

3.5 Third party insurance
In 2005, the Legislative Council passed a new insurance law, (No. 5 of 2005, which, inter alia, requires each vehicle to have a basic insurance in order to protect third parties. The Licensing Department is required to verify the payment of the insurance when renewing the annual license.

3.6 Enforcement
Enforcement on the road is a responsibility of the traffic police. The execution of enforcement is deemed as inadequate on account of the closure regime, but also as the police are inadequately trained and equipped.

4. Road Transport; public transport

4.1 General
The public transport services are fully privatized. Buses and ordinary and shared taxis are owned and operated by the private sector.

4.2 Regulation
All bus, taxi and shared taxi operations require a permit, one for each vehicle; each operator also has to have a permit. For shared taxis the permit is related to a particular route or area (normally then within a municipality). For taxis a permit may allow for operations throughout the territory, whilst buses are restricted to a specific route or to within an urban area or interurban.

The MOT issues the permit subject to an evaluation of the need for additional services. The MOT has thus established formulas for estimating the total number of permits to issue. The maximum number of permits is mainly based on estimates of the population and its distribution. The formula is thus based on the assumption that a certain number of people require a shared-taxi, a private taxi, and a bus. Based on these assumptions, the total number of required taxi permits for the West Bank was estimated to be 6,500 in year 2003. However, a license may be sold by one owner to another, which is normally done at a premium.

The MOT states that the number of permits was reasonably well controlled until the end of the year 2000, the beginning of the Intifada. However, thereafter implementation of the formula has not always been followed by MOT, and lately the number of licenses offered has been based on criteria other than the one traditionally used by the MOT.
Major bus lines are operated by companies under permits, referred to as a concession, and some of these concessions date back to the period of the British mandate over Palestine and are not time limited.

The MOT also establishes maximum fares for routes and each type of public transport. This maximum fare is calculated based on a cost formula plus allowing for a profit, and for each route. The cost per kilometre is thus calculated by taking into account fuel (diesel) consumption, vehicle registration fees, insurance, vehicle depreciation and maintenance, and the driver's wage. The maximum fare varies based on route length; as the distance increases the fare per kilometre decreases. For example, the bus fare per kilometre is NIS0.39 for a 5-km trip length and NIS0.13 for a 20-km trip length.

Actual fares for public transport are often lower than the fares set by MOT. Buses and shared-taxis on certain routes offer discount prices for special groups, such as students. In a survey of intercity bus riders in the northern West Bank, 48 percent of riders indicated that low cost was the number one reason for riding a bus. The study estimated fare elasticity for bus riders at -1.82, a high value in comparison with other countries. This shows the importance of public transport fares in the people's decision to use such modes. However, by the end of the year 2000, the fares went up drastically because of the long detours and rough roads resulting from road closures following the outbreak of the Intifada.

4.3 Performance
Public transport consists of buses, shared-taxis (including vans), and taxis. In addition, there is a substantial illegal operation of private and shared-taxis. In 1999, about one third of inter-city passengers were carried by buses and taxis; see Annex Table 8.1. However, today and through observation, a large share is of inter-city passengers are for share-taxis (or high occupancy vans).

Annex Table 5: Modal Split in the Palestinian Territories in 1999

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Private</th>
<th>Taxi</th>
<th>Bus</th>
<th>Van</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modal Split (%)</td>
<td>48.5</td>
<td>21.7</td>
<td>12.0</td>
<td>17.8</td>
</tr>
</tbody>
</table>

Source: Sinha and Hamida, 1999

Public transport in certain cities, such as Nablus, Jerusalem, and Bethlehem, and on long distance routes, is provided by medium-sized and full-sized buses. This is supplemented by shared-taxis, which operate both on long distance routes, and on short haul services within the larger cities and from cities to surrounding villages, and taxis, which are available for individual point-to-point transport.

Some bus companies have obtained permits to provide services via the King Hussein/Allenby Bridge to and from Jordan. There is no bus service between the West Bank and the Gaza Strip.
In the last few years, public transport (particularly shared-taxis) has become the key mode of transportation for most Palestinians especially for intercity travel. Occupancy of shared taxis ranges between 4 and 7 passengers depending on the capacity of the vehicle and the nature of the route (urban or inter-urban).

The quality of service offered by public transport is generally viewed as inadequate as regards coverage, comfort, and convenience. Most bus companies and taxis are said to be experiencing losses due to reduction in demand, unfair competition by illegal taxis, overlap of services with legal public taxis, high operating cost, high licensing fees, and lack of government polices protecting bus services and companies.

It is estimated that one third of the conventional buses in operation before the Intifada are now out of operation due to decline in demand. For example, Tammimi Bus Corporation, which services the external routes in the northern part of the West Bank, once operated with 48 buses but now has only 11 buses in service. On the internal routes, it had 37 buses operating before the Intifada; this number has now been reduced to 22.

In 1999, the total number of registered bus companies in the West Bank was about 100 with a total fleet of about 700 vehicles. About 70 percent of these were registered in the governorates of Nablus and Ramallah. By the year 2000, the number of bus companies had decreased to 84 with a combined fleet of 648 buses. Thereafter, MOT records show that there has been an increase; the total number of registered bus companies in the West Bank reached 90 with a total fleet of 789 buses in 2005.

The total number of buses and minibuses in Gaza Strip was about 177 vehicles in 2000, and has then continued to increase, reaching 184 vehicles in 2002 and 214 vehicles in 2005.

The MOT used to specify the maximum allowed age of a bus to be 17 years. However, due to the conditions arising out of the Intifada, this maximum age has been increased to 24 years. In addition, the ministry is not enforcing this requirement at the present time. A survey of bus companies’ fleets indicated that the current average age of buses is close to 20 years, which is close to the maximum allowed age.

Taxis are an important means of transport within the towns, where bus services are limited and private car ownership is relatively low. Taxis are typically four-seated vehicles. Like the shared-taxis, they may be owned by their drivers or by small companies. In each city, there are a number of taxi offices, which control several cars.

Observations suggest that there is excess capacity in the industry. The number of taxis increased significantly in the past several years as the PA resumed granting permits in 1993 after years of strict Israeli control. Furthermore, in recent years, and in conflict with the criteria established by MOT, the ministry has issued additional permits. Thus, the supply of taxis has increased while the demand has not increased by the same amount.
In 1997, the number of registered shared-taxis in Gaza Strip was about 1,200 vehicles, and in the West Bank it was about 1,500. While the Gaza numbers remained the same the West Bank ones dropped to 3,616 in 2003 and gradually increased to 4,886 in 2005.

In the year 2000, the number of taxis with permits was 1,173 in the Gaza Strip and 6,090 in the West Bank. In 2001, the Gaza numbers remained the same while it decreased to 5,542 in the West Bank, a further drop in 2002 to 4,804. The main reason for this drop was the increasing number of operating taxis that did not renew their licenses and the general decrease in public transport services because of the declining economic conditions and road closures.

MOT statistics suggest that the total number of private and shared-taxis subsequently increased gradually in the West Bank during the period of 2003-2005, reaching 5,916 vehicles in 2003, 7,911 vehicles in 2004, and 9,049 vehicles in 2005. This increase can be attributed to an increased presence of the Palestinian traffic police and to a MOT campaign of reducing registration fees by half resulting in fewer illegal operators. This may also be attributed to the closure regime and the inability of vehicles to leave their own towns and therefore additional vehicles are needed to transport people and goods between communities.

The number of taxi permits offered by the MOT is at present far beyond the actual need. For example, more than 90 new taxis and shared-taxi permits were issued in the city of Nablus alone in 2006. Moreover and as mentioned earlier, there is a serious problem of illegal public transport operations. The MOT estimated that in the late 1990s there were about 10,000 vehicles in the West Bank and Gaza Strip working without permits. Efforts to control the situation led almost to an elimination of the problem by September 2000, when the Intifada erupted. However, after year 2000, illegal operations have returned and became worse than before because of the closure regime and the absence of enforcement.

4.4 Terminals
Each city has one or more public transport terminals. The terminal is normally well located within or close to the city center. Some terminals have sufficient parking space (such as Ramallah) and others do not (such as Tulkarm). Moreover, design standards are poor and most terminals do not have adequate facilities for passengers, such as a waiting hall, restrooms, and trip schedule information.

Taxi offices have reserved on-street parking stands in front of their offices. But taxis often use additional non-designated parking spaces or double-park. In addition, some locations of the parking areas for taxi offices are inappropriate as they are located at intersections.

4.5 Public Transport Costs
The limitations imposed on accessing major roads have impacted the public transport cost and time. Both travel cost and time have increased substantially in a period of increased unemployment and drop in income. A comparison in travel cost and time between 2000 and 2007 shows that travel cost has increased by nearly three times while travel time has quadrupled in certain locations (Annex Table 6). This, as a result, is contributing to an
increase in the household expenditure related to transportation. Between 2004 and 2005 transport cost as part of the average household expenditure increased from 8.4% to 9.3% with a maximum increase of up to 10.1% in the central West Bank governorates. This is considered a relatively high when compared to neighboring countries such Jordan at 5.75% and Egypt at 6.7%.

### Annex Table 6: Comparison of Travel Time and Cost Before and After the Intifada

<table>
<thead>
<tr>
<th>Trip Route (Origin-Destination)</th>
<th>Travel Cost (NIS)*</th>
<th>Travel Time (min)</th>
</tr>
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</tr>
<tr>
<td>Jerusalem – Hebron (Jerusalem Residents)**</td>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>

* In January 2007, 1 US$ is equivalent to 4.3 New Israeli Shekels (NIS)

** Jerusalem residents have access to shorter routes that are not accessible to other West Bank residents.

According to the Bank’s observation of 2004, both West Bank and Gaza witnessed proportional increases in transportation prices: 5.6 percent in the West Bank, and 5.7 percent in Gaza. In 2005, roughly parallel increases of 2.8 percent in Gaza and 3.0 percent in the West Bank. Thus far in 2006, the transportation index was up 6.1 percent in the West Bank and 6.4 percent in Gaza – higher than the year before and comparable to those seen in 2004.

A survey of conducted on students attending An-Najah University in Nablus in the northern West Bank (54% of its population are from outside Nablus Governorate) has shown that student’s average monthly transportation expenses has increased from about NIS 340 in 2000 to nearly NIS 895 in 2002. To cope with this increase, about one fourth of the students are electing to visit their families (home town no too far from Nablus) only once a semester in comparison to multiple visits in previous years.

Movement of people has also been impacted by the construction of the “Separation Barrier” in the West Bank. Such Barrier has caused severe disruption to the daily lives of Palestinians living within or in nearby communities affected by it. Many have now very

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68 PCBS
69 The West Bank and Gaza Update, the World Bank Group, September 2006
70 Za’anoon, The Social and Economic Implications of the Influx of An-Najah University Students to Nablus, 2002
limited access to the essential services, work places and to their farm lands. Key transport and travel indicators shown in Annex Table 2 can exemplify such impact with a particular focus on transport mode, travel distances, time and fares. These indicators have shown a drop in licensed transport vehicles due to the increase in associated cost allowing an informal and less safe sector to be introduced. Moreover, there has been a tremendous increase in travel cost and time as well as the traveled distance especially with the use of alternate routes that are less direct and are at much lower pavement quality.

Annex Table 7: Transport Related Indicators for Selected Communities in Qalqilya Governorate: Before and After the Construction of the Wall\textsuperscript{71}

<table>
<thead>
<tr>
<th>Towns and Villages in Qalqilya Governorate</th>
<th>No. of Public Transport Vehicles</th>
<th>Travel Distance to Qalqilya City (km)</th>
<th>Avg. Trip Time to Qalqilya City (min)</th>
<th>Trip Fare: to Qalqilya City (NIS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>Azzon Atmah</td>
<td>50</td>
<td>3</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Beit Imrin</td>
<td>6</td>
<td>2</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Falamya</td>
<td>0</td>
<td>2</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Hableh</td>
<td>14</td>
<td>12</td>
<td>3</td>
<td>46</td>
</tr>
<tr>
<td>Izbat Salman</td>
<td>6</td>
<td>2</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>Izbat Jalood</td>
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<td>0</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Al-Dab’ah</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>Ras Tireh</td>
<td>20</td>
<td>0</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Ras Atiyah</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>30</td>
</tr>
</tbody>
</table>

\textsuperscript{71} Source: Abu-Eisheh, 2004

5. Road Transport; Freight

5.1 General
Freight transport is road-based and freight is carried by means of light and medium-sized trucks with 2 or 3 axles. Trailers, articulated trucks, and special purpose trucks are rarely used. Freight transport is fully private. Vehicles are owned and operated by individuals or companies. A very high percentage of vehicles are old, about 20 years.

5.2 Regulation
A permit is required for the transport of goods for hire and reward. However freight routes are not fixed and prices are not regulated. The MOT recently started regulating the transport of hazardous material. At present, there is no effective enforcement of maximum weights or axle loads.

5.3 Vehicle fleet and performance
The number of operating vehicles in freight transport, as reported by PCBS, has increased by 25\% during the period of 1995-1998. This was the period following the establishment

\textsuperscript{71} Source: Abu-Eisheh, 2004
of the PA, when the economy was doing reasonably well. By 1998, there were 22,000 and 8,000 trucks registered in the West Bank and the Gaza Strip respectively. In 2001, the number of licensed trailers/semi-trailers in the Palestinian territories was 386, with the vast majority in the Gaza Strip. The number of trucks in the Palestinian territories was 22,829, with a majority in the West Bank. In addition, it is estimated that there were approximately 900 vehicles operating illegally.

In 2002, the number of licensed trailers/semi-trailers and trucks dropped in the West Bank, while it increased in the Gaza Strip. The decrease in the West Bank may be explained by the Israeli invasion of the West Bank. In 2003, the number of licensed trailers/semi-trailers and trucks therefore increased significantly compared to 2002. In 2004, the number of both licensed trailers/semi-trailers and trucks increased again, in the West Bank by about 7.5% and in the Gaza Strip by 4.8%. Finally in 2005, the number of licensed trailers/semi-trailers and trucks increased by 17.7%, and 6.7% in the West Bank and the Gaza Strip, respectively.

The number of enterprises working in freight transport in the Palestinian territories was 33 in 2000 and 35 in 2002. On the other hand, records of the Ministry of National Economy showed that there were only 14 officially registered freight transport companies in the Palestinian territories in 2003; 10 companies in the West Bank and 4 in Gaza Strip. Several companies went out of business or froze their operations mainly because of the restrictions imposed by the Israelis.

6. **Fees paid by road traffic collected by PA**

Vehicle owners in the West Bank and Gaza pay registration fees, annual licence fees, driver licensing fees, taxi and bus permits fees, license plate fees, ownership change fees, and for vehicle inspection, which are all collected by the MOT. This makes the MOT the second income generating ministry of the PA. In addition, vehicle owners pay usual taxes/duties on fuels and vehicles, which are collected by the customs authorities.

The financial revenues generated by the fees collected by MOT in the last seven years was highest in the year 2000 (NIS155.4 million = US$34.5 million), just before the Intifada. The lowest amount of collected fees was in the year 2002 (NIS73.6 = US$16.3 million), which was due to the incursion of Israeli forces into almost all West Bank cities, resulting in long curfews and an absence of enforcement. The decline in paying fees was higher in the West Bank than in the Gaza Strip.

The collected revenues have gradually been increasing again since 2003 due to the partial resumption of enforcement and reduced fees to attract more legal registration of vehicles. Total revenues reached NIS147.6 million (US$32.8 million) in the year 2005. However, there was a decline in fee collections in year 2006 as government agencies, including the Vehicle Registration and Licensing Departments, were on strike for several months.
Annex 4: Volumes of International Transport and Trade

The summary of trade values for WBG between 1995 and 2004 are shown in Table A5.1. The final trade values with Israel after year 2004 were not available at the time when this report was prepared. More complete information is available on the Karni/Al-Montar commercial crossing, which is the primary commercial crossing for Gaza, and which has shown illustrates severely restricted operations in 2006.

Israel has remained the main trade partner for WBG over the years. The exports to Israel made up about 94% of the total WBG exports in 1996, and increased to approximately 96% in 1999. During the period of 2000-2005, it then decreased and reached 90% in 2004 as may be seen in Annex Figure 5.

Exports to Arab countries amounted to approximately 5% in 1996, decreased to approximately 3% in 1999, and increased to 6% in 2004. The share of American, European, and Asian countries of the WBG’s export was no more than 1-4%.

Israel was also the main source of imports for WBG; approximately 80% of imports derived there from in 1996, and they then decreased to approximately 73% in 2000. However, trade with Israel was affected by the political conditions after year 2000, especially imports, which decreased to a low in 2001 (66.5%), and then increased to 74% in 2004. European and Asian countries were the second and third sources of imports, respectively. The share of imports from Arab countries was less than 3%. Annex Tables 9 and 12 contain the detailed data.

Annex Figure 5: 2000-2006 Truck loads Movement (Exports and Imports)

(Source: PALTRADE, 2006)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Value of Imports</th>
<th>Total Value of Exports</th>
<th>Net Trade Balance</th>
<th>Trade Transaction (in thousands)</th>
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<td>1,658</td>
<td>394</td>
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<td>2,052</td>
</tr>
<tr>
<td>1996</td>
<td>2,016</td>
<td>339</td>
<td>-1,676</td>
<td>2,356</td>
</tr>
<tr>
<td>1997</td>
<td>2,239</td>
<td>382</td>
<td>-1,856</td>
<td>2,621</td>
</tr>
<tr>
<td>1998</td>
<td>2,375</td>
<td>395</td>
<td>-1,980</td>
<td>2,770</td>
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<tr>
<td>1999</td>
<td>3,007</td>
<td>372</td>
<td>-2,635</td>
<td>3,379</td>
</tr>
<tr>
<td>2000</td>
<td>2,383</td>
<td>401</td>
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<td>2001</td>
<td>2,034</td>
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<td>2,324</td>
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<tr>
<td>2002</td>
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<td>1,756</td>
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<td>2003</td>
<td>1,800</td>
<td>280</td>
<td>-1,521</td>
<td>2,080</td>
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<tr>
<td>2004</td>
<td>2,373</td>
<td>313</td>
<td>-2,061</td>
<td>2,686</td>
</tr>
<tr>
<td>2005**</td>
<td>2,441</td>
<td>301</td>
<td>-2,140</td>
<td>2,742</td>
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</table>

Source: [http://www.pcbs.gov.ps/Portals/_pcbs/PressRelease/foreignt_05e.pdf](http://www.pcbs.gov.ps/Portals/_pcbs/PressRelease/foreignt_05e.pdf)

*: Remaining west Bank refers to all West Bank excluding those parts of Jerusalem which were annexed by Israel in 1967.

**: Preliminary Data

Annex Figure 6: Percent of Exports and Imports to Israel and the Trade Balance (1996-2004)
Because of this trade pattern, Israel accounts for a high share of the negative trade balance for WBG, which is an indication of the dependence of the WBG economy on Israel. However, this negative trade balance decreased till 2002, and then increased again during the period 2003-2004.

Under normal political conditions, the Palestinian economy has the potential to gradually increase its exports and decrease its imports. However, to achieve this objective, Palestinians must have adequate access to the regional and international markets by means of air, sea, and land modes of transport. Almost 99% of the Palestinian imports and all exports today pass through the afore-mentioned border crossings. Annex Table 11 shows a summary of the total value of trade by means of mode of transport during the period 2001-2004.

Most exports and imports in value terms pass through the border crossings of the West Bank compared to the crossings of the Gaza Strip. Exports from the West Bank are higher than for the Gaza Strip because of higher industrial and manufacturing capacity as well as the availability of raw materials and natural resources. Annex Tables 12 and 13 show the Palestinian the trade trend by border crossing between 1996 and 2004.

---

72 The World Bank, 2000
73 The World Bank, 2000

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<tr>
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<td>66,966</td>
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<td>56,146</td>
<td>85,411</td>
<td>81,070</td>
<td>39,668</td>
<td>36,781</td>
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<td>178,903</td>
<td>226,217</td>
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<td>263,605</td>
<td>358,829</td>
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<td>10,046</td>
<td>12,113</td>
<td>29,541</td>
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<td>26,976</td>
<td>23,089</td>
<td>19,931</td>
<td>17,619</td>
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<td>1,852,380</td>
<td>1,833,123</td>
<td>1,853,648</td>
<td>1,351,581</td>
<td>1,117,129</td>
<td>1,309,642</td>
<td>1,747,850</td>
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<tr>
<td>Asian</td>
<td>176,751</td>
<td>95,571</td>
<td>150,780</td>
<td>431,981</td>
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<td>157,105</td>
<td>205,337</td>
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<td>16,219</td>
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<td>26,474</td>
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<td>3,007,226</td>
<td>2,382,806</td>
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<td>1,515,607</td>
<td>1,800,269</td>
<td>2,373,249</td>
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</table>

(Source: PCBS, 2007)


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<td>82</td>
<td>365</td>
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<td>19,059</td>
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<td>369,680</td>
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<td>290,350</td>
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(Source: PCBS, 2007)

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<th>Total Value of Exports</th>
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<td>0</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>Al-Montar/ Karni</td>
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<td>27,645</td>
<td>23,324</td>
<td>41,760</td>
<td>59,017</td>
<td>37,501</td>
<td>26,929</td>
<td>45,879</td>
<td>38,696</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Rafah</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td><strong>Sub-Total</strong></td>
<td>33,137</td>
<td>42,270</td>
<td>42,404</td>
<td>41,760</td>
<td>59,017</td>
<td>38,424</td>
<td>32,733</td>
<td>45,879</td>
<td>38,696</td>
</tr>
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<td><strong>West Bank</strong></td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Prince Mohammad/Damiah Bridge</td>
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<td>251,925</td>
<td>208,133</td>
<td>233,801</td>
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* Total values include water, electricity, and petroleum products for Gaza Strip only

Sources: World Bank, 2000 and PCBS, 2002 and 2006

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<td>Al-Qararah/ Sufa</td>
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<td>125,375</td>
<td>45,619</td>
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<td>234,716</td>
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<td>Prince Mohammad/Damiah Bridge</td>
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<td>2,033,647</td>
<td>1,800,268</td>
<td>2,373,248</td>
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* Total values include water and electricity
Annex 5: The Road Sector

1. The Road Network

If allowed to function satisfactorily, the WBG road network length seems generally satisfying to the needs of the economy and the size of the population as the average distance to a paved road is relatively short. The length of the paved road network is almost 5,000 km according to PCBS who has the latest estimate, including almost 1000 km of bypass roads serving Israeli settlements in Area C. In addition comes about 2-3,000 km of local access roads that is unpaved and in many cases not more than earth tracks. Annex Table 14 below shows a comparison of road densities for selected countries in the region. West Bank and Gaza is topping the list in terms of network length per land area and paved road length per GDP. The data are deceiving as not all roads and land areas are available to the Palestinian population, and the rural access roads are poorly developed and have mediocre quality. Besides, there are also missing road corridors and bottlenecks in the network hampering the potential for recovery and effective and efficient functioning of all sectors. Many of the countries in the region have large, un-habitable desert areas that also must be considered for such comparisons to be meaningful. Traffic levels on arterial roads ranging between a few hundred and up to 15,000 vehicles per day and are growing at about 4-5% annually.

Annex Table 14: Regional comparison of road network densities (ranked in order of network length per land area)

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<tr>
<th>Country</th>
<th>Total Network per Land Area (km/1000 sq. km)</th>
<th>Total Network per Total Population (km/1000 persons)</th>
<th>Total Network per GDP (km/million US$)</th>
<th>Paved Road Length per Land Area (km/1000 sq. km)</th>
<th>Paved Road Length per Total Population (km/1000 persons)</th>
<th>Paved Road Length per GDP (km/million US$)</th>
<th>Proportion of Total Road that are Paved (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaza</td>
<td>675</td>
<td>1.19</td>
<td>1.20</td>
<td>675</td>
<td>1.19</td>
<td>1.20</td>
<td>100.00</td>
</tr>
<tr>
<td>Syria</td>
<td>499</td>
<td>4.94</td>
<td>3.82</td>
<td>100.40</td>
<td>0.99</td>
<td>0.77</td>
<td>20.10</td>
</tr>
<tr>
<td>Morocco</td>
<td>129</td>
<td>1.93</td>
<td>1.15</td>
<td>72.94</td>
<td>1.09</td>
<td>0.65</td>
<td>56.42</td>
</tr>
<tr>
<td>Djibouti</td>
<td>125</td>
<td>3.71</td>
<td>4.36</td>
<td>15.70</td>
<td>0.47</td>
<td>0.55</td>
<td>12.60</td>
</tr>
<tr>
<td>Tunisia</td>
<td>122</td>
<td>1.91</td>
<td>0.67</td>
<td>79.97</td>
<td>1.25</td>
<td>0.44</td>
<td>65.40</td>
</tr>
<tr>
<td>Yemen</td>
<td>123</td>
<td>3.20</td>
<td>5.08</td>
<td>19.16</td>
<td>0.50</td>
<td>0.79</td>
<td>15.53</td>
</tr>
<tr>
<td>Iran</td>
<td>109</td>
<td>2.66</td>
<td>1.09</td>
<td>72.19</td>
<td>1.76</td>
<td>0.72</td>
<td>66.30</td>
</tr>
<tr>
<td>Iraq</td>
<td>104</td>
<td>1.87</td>
<td>3.61</td>
<td>87.80</td>
<td>1.58</td>
<td>3.05</td>
<td>84.39</td>
</tr>
<tr>
<td>Jordan</td>
<td>83</td>
<td>1.35</td>
<td>0.64</td>
<td>83.45</td>
<td>1.35</td>
<td>0.64</td>
<td>100.00</td>
</tr>
<tr>
<td>Egypt</td>
<td>62</td>
<td>0.85</td>
<td>0.79</td>
<td>48.74</td>
<td>0.67</td>
<td>0.62</td>
<td>78.16</td>
</tr>
<tr>
<td>Algeria</td>
<td>44</td>
<td>3.21</td>
<td>1.23</td>
<td>30.09</td>
<td>2.21</td>
<td>0.85</td>
<td>68.90</td>
</tr>
</tbody>
</table>

Sources: The Road Network Length Database and World Development Indicators (World Bank). For West Bank and Gaza the road network size have been assumed to be about 5000 km (all paved) including settlement roads and municipal main roads corresponding reasonable well with latest information from PCBS. Unpaved roads are not included due to low quality and unreliable data on lengths. Attached is a spreadsheet with the background data for most countries for further comparisons.

There is uncertainty as to the exact length of the network, as non of the key institutions involved in the sector (MPWH, MOT, MOP, MOLG, MOA, or PCBS) has the same
understanding of the lengths and classification of roads under their administration. The Annex Table 15 below gives the most recent estimate by the Palestinian Central Bureau of Statistics (2005) and an overview of the key agencies and the different road classifications as seen by the PCBS.

**Annex Table 15: Road Length Distribution by Road Class**

<table>
<thead>
<tr>
<th>Road Class</th>
<th>Length [km]</th>
<th>Paved</th>
<th>Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Roads</td>
<td>936</td>
<td>936</td>
<td>MOT/MPWH</td>
</tr>
<tr>
<td>Regional Roads</td>
<td>782</td>
<td>782</td>
<td>MOT/MPWH</td>
</tr>
<tr>
<td>Local Roads and Streets</td>
<td>4,150</td>
<td>~2308</td>
<td>MPWH/MOLG/</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Municipalities/</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MOA</td>
</tr>
<tr>
<td>Bypass and settlement roads</td>
<td>974</td>
<td>974</td>
<td>GOI</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,842</strong></td>
<td>~5,000</td>
<td></td>
</tr>
</tbody>
</table>

Source: PCBS, but length of unpaved network derived from data from PGC.

The MPWH has a definition of main roads and regional roads that exclude sections within municipalities, and their defined network is much smaller and (presumably) only includes roads that MPWH consider under their purview (Annex Table 16). A Road Law that classifies the road networks in terms of who is the owner/administrator for which road class/type and which section of road is urgently needed, including urban or municipal roads and rural access/feeder roads serving agriculture and rural communities. The road network discussed in this document is longer and assumed to include main roads and regional roads within municipal boundaries as a national responsibility, similar in this respect to arrangements in Jordan.

**Annex Table 16: Road Length by Road Class**

<table>
<thead>
<tr>
<th>Region</th>
<th>Main [km]</th>
<th>Regional</th>
<th>Local</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Bank</td>
<td>489</td>
<td>634</td>
<td>1,125</td>
<td>2,248</td>
</tr>
<tr>
<td>Gaza Strip</td>
<td>130</td>
<td>238</td>
<td>305</td>
<td>675</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>619</strong></td>
<td><strong>872</strong></td>
<td><strong>1,430</strong></td>
<td><strong>2,921</strong></td>
</tr>
</tbody>
</table>

Source: MPWH

A relatively high proportion of the road network is in poor or failed condition. No comprehensive road condition survey has been carried out since 1996, so the exact lengths of roads in different condition categories (very good, good, fair, poor, and failed) are broad estimates. Based on a partial inspection carried out in 1999 and recent estimates by MPWH large sections of the road network are considered in an unsatisfactory condition (poor, very poor or failed), due to lack of regular maintenance over many years. Because of actions imposed by Israel after the second Intifada, the already old roads mainly serving

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74 A new road law has been under preparation has drafting has not been completed.
Palestinian areas have sustained severe additional damages including destruction of long sections of road pavements, bridges, road furniture and traffic control devices. Over the same time period the GOI have completed a network of almost a thousand km of bypass roads and other roads serving only Israeli settlements in Area C. Below is a table of the current condition of a part of the network:

Annex Table 17: Pavement Conditions of the Road Network in 2006 by Road Class in Percent

<table>
<thead>
<tr>
<th>Road Class</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main</td>
<td>34</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>Regional</td>
<td>16</td>
<td>32</td>
<td>52</td>
</tr>
<tr>
<td>Local</td>
<td>18</td>
<td>26</td>
<td>56</td>
</tr>
<tr>
<td>Overall</td>
<td>23</td>
<td>29</td>
<td>48</td>
</tr>
</tbody>
</table>


2. **Key Issues**

In addition to the fact that there is at present no adequate legal framework for the road sector, the following key issues may be identified.

**Loss of Road Assets:** For the purpose of getting a sense of the magnitude of the cost of clearing the road maintenance and rehabilitation backlog caused by lack of repairs and maintenance and the associated restoration of road assets, the following assumptions have been made: almost 30 percent (about 1,500 km) of the old paved road network would require pavement rehabilitation or full pavement reconstruction to restore its condition; in addition and due to old age, another 1000 km of the old network should shortly benefit from periodic maintenance works (resealing of asphaltic pavements), and another 900 km of unpaved but important rural roads will require regravelling and grading over the same time period. The remainder of the network is assumed to be in fair to good condition or better, but also this network (estimated at 2500 km of paved roads and another 900+ km of rural gravel or earth roads) would require regular maintenance (routine maintenance for 5 years and then, over the following 5-10 years, periodic maintenance will also be necessary (resurfacing and regravelling, outside of the medium term scope of this paper).

Annex Table 18: Program to Restore Road Assets (costs in US$)
<table>
<thead>
<tr>
<th></th>
<th>Paved (km)</th>
<th>Unpaved</th>
<th>Cost/km</th>
<th>Requirement 5 years (US$M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rehabilitation</td>
<td>1,500</td>
<td></td>
<td>150,000</td>
<td>225</td>
</tr>
<tr>
<td>Strengthening (AC)</td>
<td>1,000</td>
<td></td>
<td>100,000</td>
<td>100</td>
</tr>
<tr>
<td>Unpaved roads</td>
<td>900</td>
<td></td>
<td>50,000</td>
<td>45</td>
</tr>
<tr>
<td>Routine Maintenance</td>
<td>2,000</td>
<td>900</td>
<td>1,000 per year</td>
<td>14.5</td>
</tr>
<tr>
<td>Periodic Maintenance (reseal)</td>
<td>500</td>
<td></td>
<td>5,000 per year</td>
<td>12.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>397</strong></td>
</tr>
</tbody>
</table>

This would mean that to restore the existing road assets would cost on the order of US$80 million per year over 5 year period. The above rates and road lengths are tentative and to be confirmed.

**Rural Accessibility:** The IDF imposed restrictions on the movement of people and goods and the separation wall have made the general poor rural accessibility in the West Bank much worse, and in many communities the increased isolation have seriously affected the livelihood of rural communities and their access to employment, markets, and basic social services. In rural areas with road access, the roads are too narrow with poor alignment causing accidents and inadequate and costly provision of public transport services. Addressing this rural isolation with better access roads connecting villages and communities with the paved road network is expected to be a key element in any strategy to address poverty. See road development program below.

**Management of the road network is weak and staffing inadequate:** The responsibilities for road planning, construction, maintenance and funding are split between multiple ministries and agencies depending on the type of work, funding source, and category of road in a way that is confusing and overlapping. The past policy of having one agency responsible for development projects (PECDAR), while other agencies (MPWH/Municipalities/MOA) are responsible for subsequent maintenance management, has the potential of inefficient allocation of resources between construction and maintenance, besides the potential of poor ownership and subsequent maintenance. This situation is compounded by a weak information base in the road sector generally that creates uncertainty as to the state of the network, sharing of responsibilities including budgeting for road maintenance within municipalities, and costing of road works.

The organizational diagram of MPWH shows a very compartmentalized institution with all road management activities divided between just two departments, the Directorate for Roads and the Directorate for Supervision and Follow-up which presumably include follow-up of housing and other public works projects as well. MPWH has a regular staff of about 120, with 40 in the West Bank office in Ramallah and 80 in their offices in the Gaza Strip. That amounts to about 3 staff per 100 km of roads. The corresponding number of staff in a selection of countries in Europe, Africa and Australasia varies from 2 to 16 staff per 100 km. The number of km of roads per engineer and technician is also low.
overall impression (preliminary) is that the staffing of the roads administration in WBG is inadequate for the size of the road network, and that considerable strengthening is needed. Even if the staff of PECDAR involved in road management would be merged with MPWH’s roads directorates, one would still have a very small group of professionals in charge of a substantial network with an asset value of more than US$2 billion. Building permanent capacity will be a challenge under such conditions. There is no more any need for temporary arrangements (PECDAR) or special implementation responsibilities used in the past to enable a quick start to civil works in the road sector. Several key lessons have emerged from Bank experience in:

- **Leadership matters.** Building institutional capacity depends critically upon leadership in the key ministries and institutions. Strong and effective leaders also have the ability to attract high quality staff and advisors, as well as being able to mobilize funding.
- **Incentives also matter.** It is almost impossible to attract and retain motivated staff unless there is decent pay and selection and promotion of staff is on merit. Getting the basic incentives right makes sure that trained staff remains in the organization and makes fighting corruption easier.
- **Build on what exists.** Institutions that survive a war are more resilient than they appear. Municipalities in the West Bank and Gaza possessed good administrative and financial capacity and were the conduit of aid in the mid 90s. The current road management capacities in MPWH and PECDAR have to be the basis for any reform program in the road sector.

3. **Proposed Development Program**

Road Sector Development Needs. The latest development plans for the road sector is the Palestinian Medium Term Development Plan (MDTF) of 2006-2008 and the transport development plan of MOT dated 2006. Both of these plans stress the needs for rehabilitation and repairs of the infrastructure. Based on these priorities and a set of selection criteria a tentative investment program was prepared by the consultant. The main objectives of the programs were to: (i) repair damages to the road network and other adverse impacts caused by the Israeli Defence Forces, the movement restrictions, and the segregation wall; (ii) foster economic growth and provide employment to alleviate poverty; (iii) provide better road access to rural areas with a location disadvantage; and (iv) address the accumulated road maintenance backlog of road rehabilitation works.

In the road sub-sector, the key emphasis must be put on clearing the maintenance backlog and establish a foundation for capacity building through institutional restructuring to provide a more effective road sector management, without which the mobilization of financial resources would be difficult. However, also rural accessibility improvements would be critical at an early stage due to the isolation of many communities, and the effect of rural road investments on poverty and employment.

The five year program of road works would have to taken into account some capacity improvements for some of the roads in the network, estimated to be necessary when normal traffic operations again are possible and not hindered by the current road closure.
regime. In fact, limited improvement to capacity would have to be addressed on some roads as part of the road rehabilitation program to remove the maintenance backlog although this would increase asset value and not just restore it. Such improvements make sense to avoid coming back with further road works on the same stretch of road after a short period of time.

The road program should include for investment expenditures on main and regional roads as they pass through municipalities. The limited technical and financial capacity of the urban areas makes it difficult to rely on them as financiers and implementing agencies for road works on the highway network. To what extent there should be a sharing of maintenance costs for such roads would have to be addressed in the policy statements and legislations.

It is also assumed that the future road administration for Palestine would have to be responsible for local rural roads (village and community access roads) as well to avoid too much fragmentation in the road sector responsibilities. The road sub-sector program below therefore includes a specific program for accessibility improvements now under the MOA. However, regular access roads to farms and purely agricultural development roads would still be a responsibility of the MOA. Urban and municipal development plans would have to include local streets and urban roads as well as other municipal infrastructure development. Only a full reclassification of the road networks would bring clarity in the allocation of roads to administrative units and define ownerships for road right-of-ways.
Annex Table 19: Road Stabilization and Development Program over Five Years (US$ million)

<table>
<thead>
<tr>
<th>Programs</th>
<th>Expected Annual Investment Needs</th>
<th>Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 2</td>
</tr>
<tr>
<td><strong>Stabilize Existing Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine Maintenance</td>
<td>1.5</td>
<td>3</td>
</tr>
<tr>
<td>Periodic Maintenance</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Road strengthening</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Road rehabilitation</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td><strong>Rural Access Roads</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restore 900 km gravel roads.</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Low cost sealed roads 250</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Network Improvements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Widening of existing links</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>New Network Links</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Totals Road Programs</strong></td>
<td>35</td>
<td>102.5</td>
</tr>
</tbody>
</table>

Comments:
- The expectation is that the regular maintenance expenditures on existing road networks would be financed by PA starting from year 4. This would increase to US$42.5 million annually from year 6 and thereafter, assumed to be the minimum annual expenditures on roads to prevent asset loss.
- The rural access road program is expected to continue as an annual program to address rural isolation.
- The widening of existing road links is increasing the value of the road assets, and implementation may in some cases be coordinated with the rehabilitation/restoration of existing road links. New network links would mainly be the West Bank to Gaza Territorial Link and the Wadi An-Nar main road upgrading. Here studies would be needed to define standards and estimate costs and impacts.
Annex 6: The West Bank to Gaza Territorial Link, the Gaza International Airport and the Gaza Seaport

1. The West Bank and Gaza Territorial Link

A link between the West Bank and Gaza is extremely important for any future Palestinian State while maintaining in perspective Israel’s security concerns. Such link will provide territorial contiguity, population and social connectivity, employment and work related travel, administrative travel, internal and external tourism, trade facilitation and access to internal and external markets. This was clearly noted in the US brokered Agreement for Movement and Access (AMA) in November 15, 2005.

The Link aims to connect the Palestinian population of 4 million of which 2.5 million live in the West Bank while of 1.5 million living in the Gaza Strip (the most densely area in the world). It also aims to provide the opportunity to defuse such density by possible voluntary relocation of people for social reasons, i.e. family reunification, and/or for employment opportunities in the West Bank.

Sustainable recovery of the Palestinian economy is dependent on the ability of Gaza and the West Bank to conduct normal commerce within its domestic market. This, in turn, requires reliable, efficient, low-cost and secure trade and transport links between the two Palestinian areas. A number of international organizations, UNCTAD and WCO among them, are supporting efforts to ensure efficient trade corridors for land-locked countries. The situation of WBG, where the two areas are physically separated by Israel, argues for even greater efforts to reconnect the domestic market.

The Link is also a mean to connect the two regions with important regional and international access. The only Palestinian airport, the Gaza International Airport, the future Gaza Seaport, and the Rafah border crossing terminal with Egypt are located in Gaza Strip and considered as gates to the outside world and markets, are not accessible to the Palestinian living in the West Bank. Similarly, it would provide Palestinians in Gaza improved access to Jordan via the West Bank.

Infrastructure connectivity between the two regions is also essential and reduces reliance on other sources. This includes connectivity of water, electricity, gas and telecommunication networks. Today, in addition to its own overly tapped ground water resources, Gaza relies substantially on Israel to fulfill its demands for water. For example, five million cubic meters are transported annually through Israel’s national water carrier to Gaza. Such demands may be satisfied from existing resources in the West Bank and be transported through the Link. Similarly, and should desalination of sea water is increased, excess water supplies may be transported back to West Bank through the Link. Electricity connectivity is quite similar where the Link could provide a conduit to connect electricity generated from the power generation plant in Gaza to West Bank.

75 Substantially damaged in early 2001 and after the beginning of the Intifada with an estimated repair of around US$10 million according to MOT’s estimates.
A joint mission carried out by World Bank/Canadian Customs Service staff in April 24, 2005, has presented short and long term options for connecting the two regions. Based on the Israeli–Palestinian Interim Agreement of September 1993 and subsequent agreements, interim arrangement for linking the two regions were laid out. In the short-term, two options were including: scheduled convoys for buses and trucks would be arranged with proper security arrangement. This was implemented during 1996 – 1998 period using two routes (a) buses and trucks convoys from Gaza through Erez to Ramallah through Betounia and visa-a-versa, (b) truck convoys Gaza through Erez through Bir Nabala to Jordan Valley and (c) Buses and Trucks convoys from Gaza through Erez to Tarqumiya. The other option was more of technology based alternative utilizing GPS to monitor bus and trucks convoys between the two regions.

At a future time, independent truck movement could be introduced in secure corridors. Independent truck movements offer greater flexibility and can be operated with a reasonable level of security using RFID and time-bound movements. However, in order to provide the additional level of security, independent movement would also likely involve containers or secure vans equipped with tamper-proof seals. As such, it would be limited to the larger, full-load shipments in articulated trucks.

In the long-term, and since it is likely that the number of corridors linking Gaza and the West Bank will be limited, it is important that the selected routes serve the major Palestinian production and population centers. To the extent possible, the selected route(s) should avoid urban and heavily trafficked areas in Israel so as to minimize delays and security concerns. This would also argue for limiting the distance traveled within Israel. Specially designated channels at existing or new border crossings could be used to facilitate the movement of goods to the transit route(s).

The Link can be in a number of forms including a road only, rail only, and road and rail. This 40 kilometer \(^{76}\) Link could be through a surface (at grade), submerged, a tunnel, or a combination of all the three at grade, submerged and short-distance tunnels. The general criteria for selecting the most feasible option is as follows: a) meets Palestinian aspiration for movement of people and goods, b) meets Israeli security concerns, c) shortest alignment to the extent possible, d) financially feasible in terms of cost effective in construction, operation and maintenance, e) avoids causing any irreversible damage to cultural heritage, environment, protected areas and natural resources, f) allows for infrastructure connectivity between the two regions, g) can be easily connected to existing transport network, h) avoid crossing Israeli urban and heavily trafficked areas, productive agricultural areas.

Though a detailed engineering review will be needed to analyze the various alternatives to establish the Link, a quick review would show that: (i) a dedicated surface (at grade) road is by far the most cost effective solution to connect the two regions. It would have minimal construction requirements in comparison with the other two options, and minimum social or environmental implications; (ii) a submerged (sunken) road, a more costly solution from

\(^{76}\) Exact distance is dependent on the selected alternative and the suitable topographical alignment that suites such alternative.
the previous one but found most suitable solution in the 2000/2001 Israeli expert review, would eliminate Palestinian interference with Israeli traffic and activities and present a better security option; a tunnel option, if implemented, would become the longest tunnel in the world, with some 40 kilometers of length. This option presents the following limitations: a) long distance travel in such an enclosed environment poses great accidental risk due to the driver’s fatigue implications. This is exceptionally dangerous due to the possible transport of fuel and other flammable material; and b) the cost implication is extremely high especially since a parallel emergency and service tunnel would also need to be constructed.

A detailed engineering review would also present the positive and negative features of a road versus a rail options. Such a study would need to consider the most economic and minimal investment cost alternative, low cost/affordable maintenance and operations cost, minimal cost associated with transporting of goods and people, and provides security to both Palestinians and Israelis.

2. **Gaza International Airport**

2.1 **Construction**

With the establishment of the Palestinian National Authority in 1994, one of the top priorities in the transport sector was to build an airport. A decision was made to build Gaza International Airport (GIA) (later named Yasser Arafat Airport) in the southern part of Gaza Strip near Rafah. Construction works started in 1995 and were completed by the end of 1998. The airport lies on a total area of 2800 dunums adjacent to the border with Egypt. It was arranged with Egypt to utilize its airspace for air operations.

The PA was able to mobilize funding for constructing, equipping, and operating the airport through loans from private and international sources. About US$ 86.7 million was spent till June 2006, including for aircraft; see Table A9.1. In addition, there are ongoing projects with total budget of about US$ 35 million as may be seen from Table A9.2.

### Annex Table 20: Projects Accomplished at GIA until June 2006

<table>
<thead>
<tr>
<th>No.</th>
<th>Donor</th>
<th>Details</th>
<th>Amount (US$1000)</th>
<th>Grant / Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Egypt</td>
<td>Construction the Airport facilities</td>
<td>17,206</td>
<td>Loan from Egyptian Banks</td>
</tr>
<tr>
<td>2.</td>
<td>Spain</td>
<td>Supply and Installation of Equipment</td>
<td>9,500</td>
<td>Soft Loan</td>
</tr>
<tr>
<td>3.</td>
<td>Spain</td>
<td>Supply and Installation of Equipment</td>
<td>870</td>
<td>Soft Loan</td>
</tr>
<tr>
<td>4.</td>
<td>Spain</td>
<td>Supply and Installation of Equipment</td>
<td>12,000</td>
<td>Soft Loan</td>
</tr>
<tr>
<td>5.</td>
<td>Spain</td>
<td>Supply and Installation of Equipment</td>
<td>4,500</td>
<td>Grant</td>
</tr>
<tr>
<td>6.</td>
<td>Germany</td>
<td>Supply of Equipment</td>
<td>10,000</td>
<td>Grant</td>
</tr>
<tr>
<td>7.</td>
<td>Saudi Arabia</td>
<td>Supply of one Boeing Airplane</td>
<td>4,590</td>
<td>Grant</td>
</tr>
<tr>
<td>8.</td>
<td>Netherlands</td>
<td>Supply of two Fokker Airplanes</td>
<td>20,588</td>
<td>Grant</td>
</tr>
</tbody>
</table>

77 The longest tunnel currently exists in Norway at 24.5 kilometers.
<table>
<thead>
<tr>
<th>No.</th>
<th>Project</th>
<th>Amount</th>
<th>Donor</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cargo Terminal Project</td>
<td>EURO 25 M</td>
<td>EU</td>
<td>Still in the tendering phase</td>
</tr>
<tr>
<td>2</td>
<td>Establishing the joint Building</td>
<td>US$2.27 M</td>
<td>Japan</td>
<td>80% of the project activities have been achieved</td>
</tr>
<tr>
<td>3</td>
<td>Equipment and training to operate the joint Building</td>
<td>US$2.73 M</td>
<td>Japan</td>
<td>Work will not start until finishing the construction phase</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>US$35,000 million (equivalent)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: MOT, 2006

The airport was designed according to International Civil Aviation Organization (ICAO) airport standards. The airport is capable of serving most types of aircraft including wide-bodied aircraft. The passenger terminal building is furnished with modern passenger facilities and can handle up to 700,000 passengers annually. The airport has a tower type air traffic control center. The airport was designed to allow for expansion.

GIA has a single runway with a parallel taxiway. The runway has a length of 3080 m and a width of 60 m, while the width of the taxiway is 23 m. The airport runway, taxiway, and apron areas are constructed using asphalt concrete pavements. Airport operation is performed under visual flight rules (VFR).

2.2 Operational conditions

According to the Wye River Memorandum (WRM), the Israelis have a significant role in the operation the airport, as they have the right to monitor arriving and departing passengers and cargo, and to decide whether passengers are allowed to travel or goods are allowed to be transported via the airport. The Israelis stopped further operations shortly after the start of the Intifada in September 2000.

The Palestinian Civil Aviation Authority (CAA) was created to administer and operate the airport. The CAA is part of the Ministry of Transport. It has eight departments, including engineering and maintenance, air transport, and air safety. There used to be 700 Palestinians working in the authority, the airport, and in the Palestinian Airlines (PAL) while GIA was operational.

The Palestinian Airlines (PAL) started operating in 1997, and has operated regular flights from GIA since 1999. The PAL is run by the Palestinian Civil Aviation Authority, and has a total of three planes: two Dash 8 and one Boeing 727-230 (which is now out of service). PAL had scheduled flights to a number of airports in the region. These included the airports of Amman, Cairo, Jeddah, Dubai, Doha, Istanbul, and Larnaca. In addition to PAL, a number of other airlines were using GIA, including the Jordanian Royal Wings,
Egypt Air, Royal Air Morocco, and Tarom of Romania.

The total number of passengers enplaning and deplaning in GIA during 1999 reached about 60 thousand, i.e. about 9% of the total capacity of the airport. These were transported on 1168 air flights, averaging 3.2 flights per day. The low utilization of the capacity can be attributed to the fact that only about one third of Palestinians living in the West Bank and Gaza Strip had access to the airport, and the Israeli restrictions on its use.

Demand for travel with PAL grew significantly when it started to operate out of GIA, and reached 41 thousands during 1999, compared with about 15 thousands in 1998 when the airline was operating from Al-Areesh in Egypt. In 1999, the average occupancy on PAL flights reached 53%. During the period when the airport was operational in 2000, PAL passenger demand increased by a further 74% compared with the same period of the preceding year.

After the closure of the airport, PAL reverted back to operate from Al-Areesh airport. During the period 2001-2003, there was a sharp decline in the number of flights, on account of restrictions at the Rafah border crossing. But in 2004-2005, the number of flights and passengers increased again.

Annex Table 21 shows number of available seats, passengers and flights on PAL during the period of 1999-2005. Figure A9.1 shows the development in the number of PAL passengers, from 1999 to 2005. Note, however, that the 1999, 2001, and 2002-2005 figures represent PAL passengers departing from and arriving at Al-Areesh Airport, while the 2000 figure includes predicted number for the October to December period.

**Annex Figure 6: The Development of the Number of PAL Passengers from 1999 to 2005**

![Graph showing the development of the number of PAL passengers from 1999 to 2005.](image)

(Source: MOT, 2006)

2.3 **Current conditions**

In 1999, the Gaza International Airport (GIA) was open for operations and was one mean
to transport goods to the international markets. However, and shortly after the start of the Intifada in September 2000, the Israel banned the Palestinians to continue operating the airport. Starting late 2001, the Israeli Air force jets bombed and damaged parts of the airport. The runway system was partially damaged first, and then the infrastructure and a number of other facilities and equipment were damaged. The airport required extensive rehabilitation before operations can be resumed. The total requirement for repairs of the GIA is estimated at US$28.0 million based on UK prices by Mott MacDonald firm. Annex Table 22 shows the details on the incurred damage and the estimated cost for airport rehabilitation. Transport of goods via Israel’s Ben Gurion Airport in Tel Aviv has been equally constrained. This has also been heavily dependent on the operations of the goods terminal at Karni for goods generating in Gaza.

Annex Table 22: Details of Damages Caused to the GIA by the Israeli Military

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Percentage of Destruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Runway</td>
<td>80 %</td>
</tr>
<tr>
<td>2.</td>
<td>Runway lighting system</td>
<td>100 %</td>
</tr>
<tr>
<td>3.</td>
<td>Radar building</td>
<td>100 %</td>
</tr>
<tr>
<td>4.</td>
<td>Radar building power plant</td>
<td>100 %</td>
</tr>
<tr>
<td>5.</td>
<td>Radar antenna</td>
<td>100 %</td>
</tr>
<tr>
<td>6.</td>
<td>Control equipment</td>
<td>100 %</td>
</tr>
<tr>
<td>7.</td>
<td>Electricity network and fire alert</td>
<td>100 %</td>
</tr>
<tr>
<td>8.</td>
<td>Meteorological station</td>
<td>100 %</td>
</tr>
<tr>
<td>9.</td>
<td>Radio navigation station</td>
<td>25 %</td>
</tr>
<tr>
<td>10.</td>
<td>General petroleum authority building</td>
<td>10 %</td>
</tr>
<tr>
<td>11.</td>
<td>Presidential airplane hangar</td>
<td>5 %</td>
</tr>
<tr>
<td>12.</td>
<td>Main maintenance hangar</td>
<td>10 %</td>
</tr>
<tr>
<td>13.</td>
<td>New workshop building</td>
<td>5 %</td>
</tr>
<tr>
<td>14.</td>
<td>Travel terminals and buildings</td>
<td>85 %</td>
</tr>
</tbody>
</table>

Source: MOT, 2006

The total requirement for repairs of the GIA has been estimated at US$28.0 million based on UK prices by a UK consultant (Mott MacDonald); see Annex Table 23.

Annex Table 23: Preliminary Cost Estimate of GIA Rehabilitation

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Estimated Cost (US$1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Runway and Pavement Works</td>
<td>7,013.0</td>
</tr>
<tr>
<td>2.</td>
<td>Terminals Buildings</td>
<td>6,400.0</td>
</tr>
<tr>
<td>3.</td>
<td>Instrument Landing System</td>
<td>1,555.8</td>
</tr>
</tbody>
</table>
3. **Gaza Seaport**

3.1 **Introduction**
With the establishment of the Palestinian National Authority in 1994, another major priority towards developing a viable transport sector was to establish a seaport in Gaza. Such seaport would provide the Palestinians with access to the Mediterranean and consequently the world, allowing trade with lesser restrictions. A decision was made to build Gaza Seaport to the west of Gaza City.

3.2 **Description and status of the seaport facilities**
The construction of the seaport was delayed due to Israelis opposition on account of security and custom inspection aspects. The arrangements finally agreed to included establishing procedures for checking, operations, management, and security in the seaport through a joint Sea Port Protocol. In addition, the legal framework was agreed to be defined through this joint Sea Port Protocol.

The technical and feasibility studies that were carried out proposed developing the port in three stages. The first stage would comprise (i) the construction of three wharfs, one 200 meters long for the handling of general cargo and containers and two shorter ones (140 meters); (ii) a 730 meters long breakwater, and (iii) excavation and leveling works, in addition to the necessary port facilities. The depth of the water in the port would be 11 m at this stage, so that 15-25 thousand ton ships could be served. The seaport would be able to handle up to 7 ships by the end of the first stage. This would create enough capacity to handle 1.42 million tons of cargo on annual basis. However, this capacity was planned to then be tripled over a six-year period.

The second stage would provide for the widening of the port as well as building of container terminals. These terminals would accommodate about 500,000 containers annually. In addition, a second 600 meter long breakwater would be built in order to handle steamers of up to 14 meters in depth.

Finally, the third stage would focus on equipping the port with the necessary equipment for the handling of all kinds of cargo.

### Budget Estimated Total

<table>
<thead>
<tr>
<th>Item</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. DVOR / DME</td>
<td>688.9</td>
</tr>
<tr>
<td>5. Meteorological Equipment</td>
<td>269.3</td>
</tr>
<tr>
<td>6. Radar</td>
<td>4,568.9</td>
</tr>
<tr>
<td>7. Aeronautical Ground Lighting</td>
<td>1,580.9</td>
</tr>
<tr>
<td>8. Power Substation and Supply</td>
<td>1,501.4</td>
</tr>
<tr>
<td>9. Fiber Optic Ring</td>
<td>376.0</td>
</tr>
<tr>
<td>10. ATC Tower Equipment</td>
<td>2,048.8</td>
</tr>
<tr>
<td>11. Contingencies</td>
<td>1,963</td>
</tr>
<tr>
<td><strong>Budget Estimated Total</strong></td>
<td><strong>27,966</strong></td>
</tr>
</tbody>
</table>
The construction of the first stage of the seaport started in July 2000, after all the needed technical, environmental, and economic studies had been completed. It was scheduled to be completed in 25 months. However, the construction was stopped soon after the start of the Intifada. Several months later, the Israeli Air Force destroyed what was constructed which led to a complete stop of the construction.

The PA managed to secure the necessary resources for the first stage of the port. For example, the estimated US$68.5 million needed for the first stage was to be financed by the Netherlands (US$23 million), the European Investment Bank (EIB) (US$21 million), France (US$20 million), and the PA own resources (US$4.5 million).

Institutionally, the PA recognized the need to establish an agency that would be responsible for regulating and overseeing the port’s operation. In 1999, the Palestinian Seaports Authority was created under the umbrella of the Ministry of Transport. Its initial work program was to oversee the construction and later the administration of the port operation. But in the mean time, the Authority was able to develop a number of plans and developmental programs, an organizational structure as well as the first draft of the Maritime Law. The authority has five departments, and presently employs a total number of 14 engineers and administrative staff.

Despite the assurances provided in the Agreement on Movement and Access that construction of the seaport would be allowed to proceed, there has been no implementation of this aspect of the agreement, and there is no expectation for progress in the near future.

The World Bank’s position on the establishment of the Gaza seaport was presented in a Technical Report published on August 15, 2006 entitled “An Update on Palestinian Movement, Access and Trade in West Bank and Gaza”. In this report, it was recommended that the establishment of the seaport would initially start with a smaller and achievable measure, i.e. establishing a simple roll on, roll off (RoRo) pier. This would allow for the opening of the port within a very short time, about two years, while allowing the establishment of clear sense of the demand before venturing in investing a large scale operation which may not be economically feasible in the longer term.

3.3 **Extent of damage to the Seaport and repair needs**
Following the outbreak of the Intifada in September 2000, the international contractor withdrew from construction and the donors froze the implementation of the project. By the end of 2002, the Israelis had completely damaged the facilities put in place to be able to start constructing the port proper; very limited actual construction works had been commenced.

The value of the direct damages to the structures and installations has been estimated at US$1.56 million. However, indirect damages have been valued at US$11.02 million, including payment of compensation to the contractor and the consultant, and servicing of the loan from EIB.
3.4  *Fisherman’s Port*

The fisherman’s port is located to the south of the planned Seaport in the Gaza Strip. Its current condition is not satisfactory, and it can be described as partially damaged. The structure of the fishermen’s port needs to be repaired and upgraded. This will also require strengthening of the breakwater, and padding the port basin with sheet piles. Moreover there is a need for treating the environmental pollution in the port basin.

The MOT wishes to study the possibility of using the fishermen seaport for the transport of passengers as well as to transfer the responsibility of its control to the Seaport Authority.
Annex 7: Proposed Technical Assistance Projects

1. Introduction

Three technical assistance projects are proposed:

- Developing Capacity for Policy and Planning, and Overall Sector Management
- Developing Road Network Management Capacity
- Strengthening Road Traffic and Transport Management

2. Developing Capacity for Policy and Planning, and Overall Sector Management

This is a major Technical Assistance project to MOT for a period of up to 5 years. It is proposed to comprise three components. Firstly, the development of a transport policy, which may cover the following:

- Review of the current road traffic legislation with proposals for reforms.
- Review of the current approach to economic regulation of road transport, with proposals for reform.
- Review of the current legislation for roads with proposals for reforms.
- Review of the current approach to the safety and security regulation as concerns civil aviation and sea port operation, and proposals for reform.
- Review of the current operational format and performance requirements as concerns the Palestine Airlines with proposals for reform.
- Review of the operational format and expected performance for GIA and the entity to manage the proposed sea port. This will include an evaluation of engaging the private sector to operate the facilities.
- Review and make proposals for the role of the private sector in operations of border crossing facilities.
- Review of the role of private finance for the provision of infrastructure in the transport sector.
- Review of the appropriate arrangements for the financing of road maintenance, including by earmarked taxes on road users.

The transport policy is expected to be developed and formulated in two phases, the short term and the medium to longer term. In the short term, the first three items referred to above related to roads, road traffic and road transport would be covered. During the medium to longer term the other items would be covered. The outputs would be two white papers on transport policy, or similar.

The second component would assist the PA in the harmonization and dissemination of a Transport Sector Development Strategy. This Strategy is expected to have its roots in this Transport Sector Review and Strategy Note, and will be used to manage the transport sector, in cooperation with the donor community. It will identify all required actions, who will be responsible for implementing the action and how financing is expected to be mobilised. Progress on the implementation of the Strategy will be regularly reported on.
The expected output is a regularly updated Transport Sector Development Strategy with associated progress reports, seen as effective by the donor community.

The third component will comprise capacity development of MOT and its staff. It will be based on MOT’s own plans and would then be designed in detail following a review of (i) the deliverables of the MOT, (ii) its current organisation, (iii) its human resource management function; and (iv) its current staffing. The outputs are expected to be a reformed and restructured MOT, with upgraded capacity for managing its responsibilities.

It is proposed that one or more consulting firm/individual consultants be recruited to provide all or parts of the services under the proposed technical assistance.

3. **Developing Road Network Management Capacity**

This technical assistance project is envisaged to comprise a five year twinning project with a well-established road administration of another country. Specific areas of cooperation would include:

- The overall planning, programming and management of road investment and road maintenance
- The introduction and development of hybrid (performance-based) road maintenance contracts let subject to competitive tenders
- The introduction of modern environmental management principles
- The introduction of modern road safety management principles in the road sector
- The introduction of a modern road classification system, to be done based on the recommendations made for legal developments in the road sector expected to be proposed in the new transport policy (see the previous technical assistance project).

The twinning arrangement would involve one or two experts in each field from both the foreign road administration and the PA road administration (assumed to be the MPWH), but the foreign experts would only be based on a part time basis in the WBG. The twinning arrangement would include training by way of seminars, secondment and field visits.

The program to be implemented as part of the twinning arrangement would be based on the plans prepared by the MPWH for its own capacity development. The technical assistance project would then be designed in detail following a review of (i) the deliverables of the MPWH, (ii) its current organisation, (iii) its human resource management function; and (iv) its current staffing. The outputs are expected to be a reformed and restructured MPWH, with upgraded capacity for managing its responsibilities.

4. **Strengthening Road Traffic and Transport Management**

This is a further technical assistance project to MOT in order to prepare a short term action plan to partially feed into the technical assistance projected presented in section 2 of this annex. It is expected to last at most 12 months, although the actual implementation of the recommendations of the technical assistance will last much longer. The technical
assistance comprises two elements: Firstly actions by the PA to strengthen road traffic law enforcement and enforcement of the road transport regulatory system. It is based on the premise that an important explanation of the current poor performance of road traffic and transport is to be found in that current laws and regulations are not being enforced, and that stepped up enforcement therefore will likely quickly improve performance. It is noted that when the PA in the late 1990s stepped up enforcement of road transport regulations, illegal operations quickly subsided. Improved law enforcement will be possible given the main assumption of the proposed strategy, reduced Israeli security measures. As part of the technical assistance, a quick review will be made of current enforcement measures and constraints facing enforcement. The review will result in an action plan involving all actors concerned, and may also result in a form of declaration by the PA in regard to law enforcement in road traffic and transport.

The second element of the technical assistance is a review of the need for facilities and equipment by the PA in order to undertake effective enforcement. It is expected that the review will result in an identification of critical items required, and these would also be financed under the technical assistance, provided the costs are limited. The consultant to provide the services under the technical assistance would be, however, expected to make a critical assessment of needs, and also identify low-cost and low-tech approaches to enforcement, when possible and relevant.
Annex 8: Summaries of Donor Support to the Transport Sector

<table>
<thead>
<tr>
<th>Donors</th>
<th>Sector</th>
<th>Title</th>
<th>Status</th>
<th>Fund Admin. / Counter Parts</th>
<th>Fund Channeled Through</th>
<th>Budget (US$)</th>
<th>Committed (US$)</th>
<th>Disbursed Until 2007 (US$)</th>
<th>Commitment Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIB</td>
<td>Infrastructure</td>
<td>West Bank Road Rehabilitation</td>
<td>ongoing</td>
<td>European Investment Bank, Ministry of Finance</td>
<td>PNA</td>
<td>15 000 000</td>
<td>15 000 000</td>
<td>15 000 000</td>
<td>1998-01-01</td>
</tr>
<tr>
<td>EC78</td>
<td>Infrastructure</td>
<td>EIB Interest Rate Subsidies - Roads (PLE/98/09)</td>
<td>ongoing</td>
<td>European Investment Bank, Ministry of Finance</td>
<td>Others</td>
<td>7 041 600</td>
<td>7 041 600</td>
<td>4 405 694</td>
<td>1999-01-01</td>
</tr>
<tr>
<td>Japan</td>
<td>Private Sector Development</td>
<td>Rehabilitation and Construction of Rafah &amp; Karni Crossing Points</td>
<td>ongoing</td>
<td>UNDP</td>
<td>Others</td>
<td>2 360 000</td>
<td>2 360 000</td>
<td>1 103 153</td>
<td>13/04/1999</td>
</tr>
<tr>
<td>Japan</td>
<td>Infrastructure</td>
<td>Gaza Airport - Construction and Equipments</td>
<td>ongoing</td>
<td>UNDP</td>
<td>Others</td>
<td>2 916 000</td>
<td>2 916 000</td>
<td>1 737 407</td>
<td>30/04/1999</td>
</tr>
<tr>
<td>Japan</td>
<td>Institution Building</td>
<td>Gaza Airport - Technical Assistance</td>
<td>ongoing</td>
<td>UNDP</td>
<td>Others</td>
<td>1 504 000</td>
<td>1 504 000</td>
<td>71 564</td>
<td>17/05/1999</td>
</tr>
</tbody>
</table>

78 The EC contributed Euro 0.5 million in infrastructure at Rafah towards rehabilitating the terminal buildings and the water supply. This was not found in the MOP’s database.
<table>
<thead>
<tr>
<th>Country</th>
<th>Sector</th>
<th>Project Description</th>
<th>Status</th>
<th>Implementer(s)</th>
<th>Amount</th>
<th>Source</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td>Infrastructure</td>
<td>Construction &amp; equipping of cargo terminal of Gaza International Airport PLE/99/0217</td>
<td>on hold</td>
<td>Palestinian Civil Aviation Authority, European Commission</td>
<td>PNA</td>
<td>29 340 000</td>
<td>29 340 000</td>
<td>1 327 737</td>
</tr>
<tr>
<td>France</td>
<td>Infrastructure</td>
<td>ME. Technical assistance to the Harbour Committee (Gaza)</td>
<td>ongoing</td>
<td>Palestinian Sea Port</td>
<td>PNA</td>
<td>1 073 492</td>
<td>1 073 492</td>
<td>515 210</td>
</tr>
<tr>
<td>France</td>
<td>Infrastructure</td>
<td>ME. Survey &amp; building of the Gaza port</td>
<td>ongoing</td>
<td>Palestinian Sea Port</td>
<td>PNA</td>
<td>23 885 342</td>
<td>23 885 342</td>
<td>4 843 447</td>
</tr>
<tr>
<td>Japan</td>
<td>Infrastructure</td>
<td>Al Karameh Crossing</td>
<td>ongoing</td>
<td>UNDP Others</td>
<td>Others</td>
<td>800 000</td>
<td>800 000</td>
<td>748 691</td>
</tr>
<tr>
<td>USA</td>
<td>Infrastructure</td>
<td>RRPII Roads Repair Program - phase 2</td>
<td>Completed</td>
<td>USAID, Various institutions</td>
<td>Direct Funding</td>
<td>7 063 442</td>
<td>7 063 442</td>
<td>8 622 179</td>
</tr>
<tr>
<td>USA</td>
<td>Infrastructure</td>
<td>RRPII Roads Repair Program - phase 3 (41m)</td>
<td>ongoing</td>
<td>USAID, Various institutions</td>
<td>Direct Funding</td>
<td>15 010 676</td>
<td>15 010 676</td>
<td>15 010 676</td>
</tr>
<tr>
<td>Japan</td>
<td>Infrastructure</td>
<td>Rehabilitation the Salah-Addin regional road in the Gaza Strip (need agreement)</td>
<td>ongoing</td>
<td>UNDP, Ministry of Public Works</td>
<td>PNA</td>
<td>19 000 000</td>
<td>19 000 000</td>
<td>19 000 000</td>
</tr>
</tbody>
</table>

**TOTAL** |                                 |                          |          |                                                                                  |             | 124,994,552 | 124,994,552 | 72,385,758 |
### Annex Table 25: Donors Support to PECDAR’s Program for Road Damage Repair and Rehabilitation Program (up to 3/2007)

<table>
<thead>
<tr>
<th>Donor / Program</th>
<th>Actual Paid Amount (US$M)</th>
<th>Donor / Program</th>
<th>Actual Paid Amount (US$M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>20.6</td>
<td>World Bank (EEGP–MIDP-1)</td>
<td>3.88</td>
</tr>
<tr>
<td>World Bank (IDA)</td>
<td>17.35</td>
<td>World Bank (Aqsa Fund IDB)</td>
<td>2.08</td>
</tr>
<tr>
<td>Arab Fund</td>
<td>13.87</td>
<td>Al Aqsa Fund (IDB)</td>
<td>1.89</td>
</tr>
<tr>
<td>European Investment Bank (EIB)</td>
<td>12.41</td>
<td>Korean</td>
<td>1.45</td>
</tr>
<tr>
<td>MSP III/EU</td>
<td>11.82</td>
<td>Greek Fund</td>
<td>1.42</td>
</tr>
<tr>
<td>World Bank (IDA-ERP-2)</td>
<td>11.81</td>
<td>EP-Arab Fund</td>
<td>1.27</td>
</tr>
<tr>
<td>EU (Municipal Support Program)</td>
<td>11.50</td>
<td>British Grant (BG)</td>
<td>1.23</td>
</tr>
<tr>
<td>Denmark</td>
<td>9.38</td>
<td>Canadian Government</td>
<td>1.03</td>
</tr>
<tr>
<td>World Bank - Holst Fund</td>
<td>8.87</td>
<td>EP/AF Phase 2</td>
<td>1.02</td>
</tr>
<tr>
<td>OPEC</td>
<td>6.51</td>
<td>ERP2-Italian</td>
<td>0.99</td>
</tr>
<tr>
<td>CDP Fund</td>
<td>5.19</td>
<td>EEGP-MIDP3</td>
<td>0.89</td>
</tr>
<tr>
<td>World Bank - Holst-ERSP</td>
<td>4.47</td>
<td>OPEC (CDP-2)</td>
<td>0.68</td>
</tr>
<tr>
<td>World Bank (IDA-CDP-2)</td>
<td>4.44</td>
<td>EGSD (Italian Grant)</td>
<td>0.56</td>
</tr>
<tr>
<td>Rehabilitation of damaged Palestinian Infrastructure</td>
<td>4.24</td>
<td>Norwegian</td>
<td>0.21</td>
</tr>
<tr>
<td>AFD</td>
<td>3.21</td>
<td>PCF</td>
<td>0.05</td>
</tr>
<tr>
<td>EIB (CDP-2)</td>
<td>3.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Bank (Holst- EEGP)</td>
<td>2.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Bank (ICDP)</td>
<td>2.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td><strong>140.34</strong></td>
<td><strong>Sub-Total</strong></td>
<td><strong>13.94</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>US$154.28 M</strong></td>
<td></td>
</tr>
</tbody>
</table>
Annex Table 26: Donors Support to MPWH’s Road Damage Repair and Maintenance Program (2004-2007)

<table>
<thead>
<tr>
<th>Donor</th>
<th>Amount (US$M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Islamic Development Bank</td>
<td>5.52</td>
</tr>
<tr>
<td>Al-Aqsa Fund</td>
<td>4.31</td>
</tr>
<tr>
<td>Arab Bank for Development in Africa</td>
<td>3.25</td>
</tr>
<tr>
<td>World Bank</td>
<td>1.74</td>
</tr>
<tr>
<td>MOF</td>
<td>1.13</td>
</tr>
<tr>
<td>OPEC Fund</td>
<td>0.49</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16.42</strong></td>
</tr>
</tbody>
</table>

(Source: MPWH, 2007)
Annex 9: References that this Review Study Benefited From


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