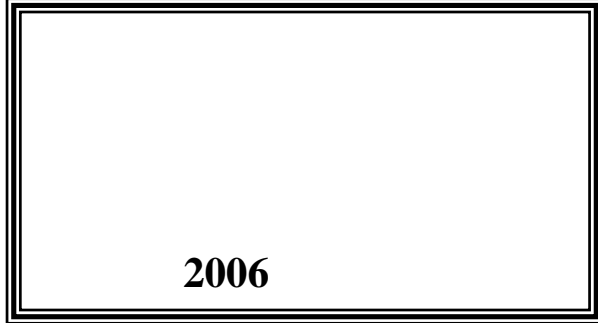


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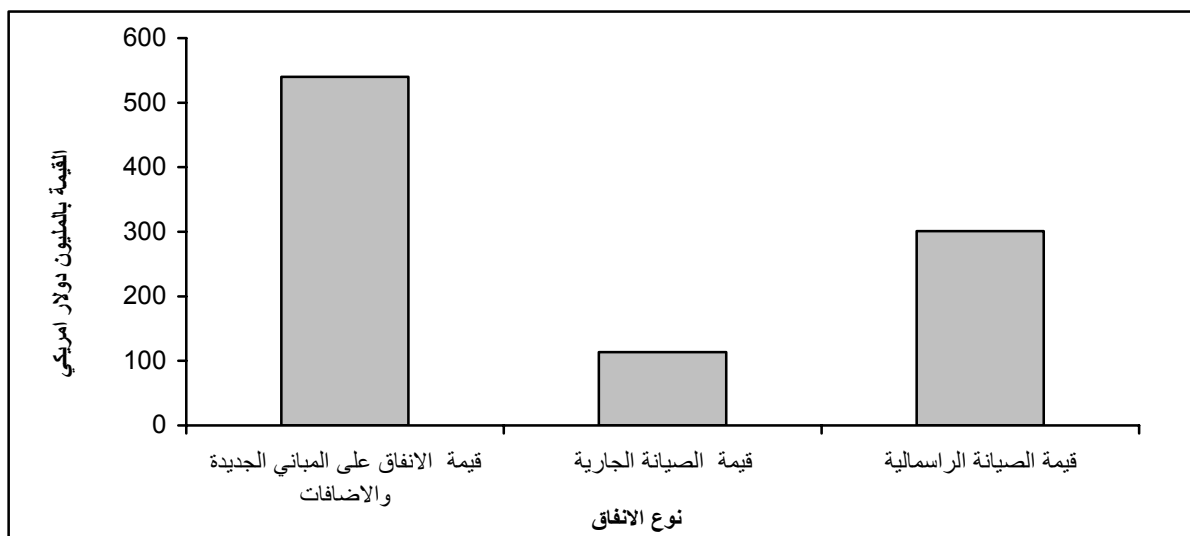
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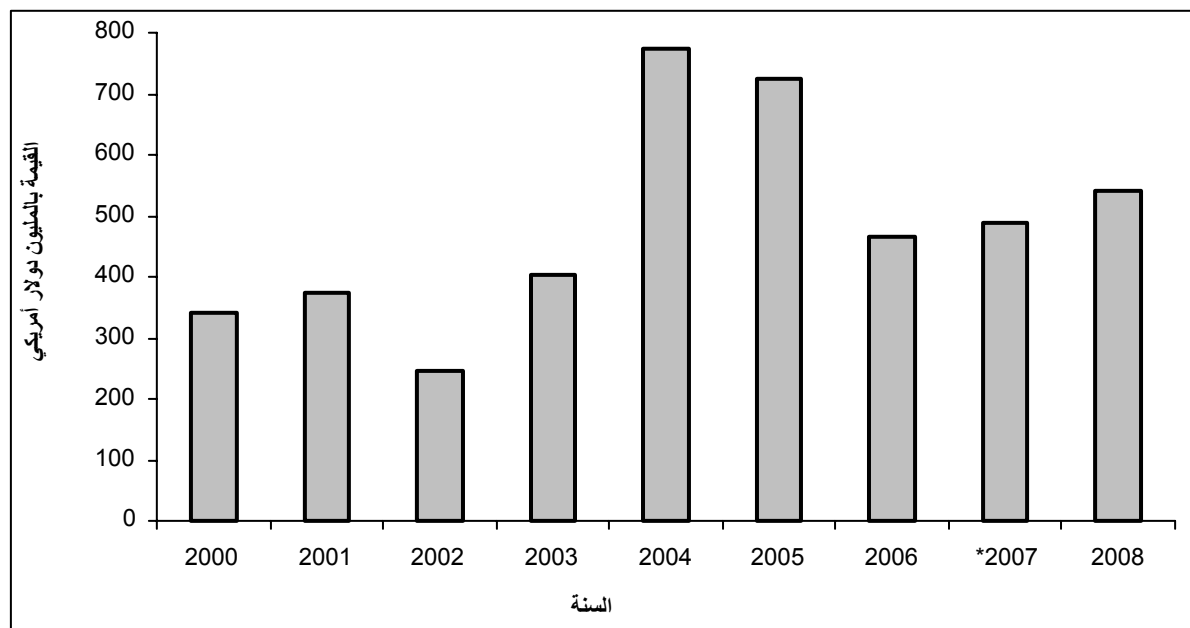
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# Tables

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**Table 1: Value of expenditures on new construction of buildings and additions in the Palestinian Territory by region and building type, 2008**

Value in US \$ 1000

Region	Building Type					
	Total	Other	* Under construction*	Enterprise	/ Villa/ House	Building
<b>Palestinian Territory</b>	<b>540,162.2</b>	<b>592.5</b>	<b>143,580.1</b>	<b>20,818.8</b>	<b>108,352.9</b>	<b>266,817.8</b>
<b>West Bank</b>	<b>539,916.4</b>	<b>592.5</b>	<b>143,580.1</b>	<b>20,818.8</b>	<b>108,352.9</b>	<b>266,572.0</b>
North of West Bank	140,513.4	29.6	55719.3	17426.2	52160.0	15178.2
Middle of West Bank	318,061.2	562.9	50167.7	0.0	30482.8	236847.8
South of West bank	81,341.8	0.0	37693.1	3392.6	25710.1	14546.0
<b>Gaza Strip</b>	<b>245.8</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>245.8</b>

\* Including building under preparation

\*

2008

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**Table 2: Value of expenditures on new construction of buildings and additions in the Palestinian Territory by region and building status, 2008**

Value in US \$ 1000

Region	Building Status			
	Total	Used but not completed	* Under construction*	Completed
<b>Palestinian Territory</b>	<b>540,162.2</b>	<b>71,024.6</b>	<b>143,580.1</b>	<b>325,557.3</b>
<b>West Bank</b>	<b>539,916.4</b>	<b>71,024.6</b>	<b>143,580.1</b>	<b>325,311.5</b>
North of West Bank	140,513.4	24,842.4	55,719.3	59,951.7
Middle of West Bank	318,061.2	12,724.6	50,167.7	255,168.8
South of West bank	81,341.8	33,457.6	37,693.1	10,191.0
<b>Gaza Strip</b>	<b>245.8</b>	<b>0.0</b>	<b>0.0</b>	<b>245.8</b>

\* Including building under preparation

\*

2008

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**Table 3: Value of expenditures on new construction of buildings and additions in the Palestinian Territory by region and building ownership, 2008**

Value in US \$ 1000

Region	Building Ownership				
	Total	* Other*	Local Authority	Govern-mental	Private
<b>Palestinian Territory</b>	<b>540,162.1</b>	<b>5,183.2</b>	<b>2,158.7</b>	<b>28,804.4</b>	<b>504,015.9</b>
<b>West Bank</b>	<b>539,916.3</b>	<b>5,183.2</b>	<b>2,158.7</b>	<b>28,804.4</b>	<b>503,770.1</b>
North of West Bank	140,513.4	5,183.2	2,158.7	26,430.5	106,741.0
Middle of West Bank	318,061.2	0.0	0.0	0.0	318,061.2
South of West bank	81,341.8	0.0	0.0	2,373.9	78,967.9
<b>Gaza Strip</b>	<b>245.8</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>245.8</b>

\*Includes UNRWA, Endowment, Philanthropic society and others.

\*

2008

:4

**Table 4: Value of expenditures on new construction of buildings and additions in the Palestinian Territory by region and building current utilization, 2008**

Value in US \$ 1000

Region	Building Utilization				
	Total	Not stated	Work and Residential	Work only	Residential only
<b>Palestinian Territory</b>	<b>540,162.1</b>	<b>319,236.2</b>	<b>12,590.5</b>	<b>32,841.9</b>	<b>175,493.4</b>
<b>West Bank</b>	<b>539,916.3</b>	<b>319,236.2</b>	<b>12,590.5</b>	<b>32,841.9</b>	<b>175,247.6</b>
North of West Bank	140,513.4	44,808.8	4,029.9	27,284.9	64,389.8
Middle of West Bank	318,061.2	252,479.8	2,397.1	0.0	63,184.4
South of West bank	81,341.8	21,947.6	6,163.6	5,557.1	47,673.5
<b>Gaza Strip</b>	<b>245.8</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>245.8</b>

2008

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**Table 5: Value of expenditures on new construction of buildings and additions in the Palestinian Territory by region and construction material of external walls, 2008**

Value in US \$ 1000

Region	Construction Material of External Walls					
	Total	* Other*	Concrete	Cement Block	Stone & Cement	Stone
<b>Palestinian Territory</b>	<b>540,162.1</b>	<b>3,105.6</b>	<b>38,590.7</b>	<b>107,302.2</b>	<b>27,300.4</b>	<b>363,863.2</b>
<b>West Bank</b>	<b>539,916.3</b>	<b>3,105.6</b>	<b>38,590.7</b>	<b>107,056.4</b>	<b>27,300.4</b>	<b>363,863.2</b>
North of West Bank	140,513.4	873.3	22,822.5	80,548.3	0.0	36,269.3
Middle of West Bank	318,061.2	727.9	840.8	18,684.0	12,441.2	285,367.4
South of West bank	881,341.8	1,504.4	14,927.4	7,824.2	14,859.2	42,226.5
<b>Gaza Strip</b>	<b>245.8</b>	<b>0.0</b>	<b>0.0</b>	<b>245.8</b>	<b>0.0</b>	<b>0.0</b>

\*Includes old stones and others.

\*

2008

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**Table 6: Value of current maintenance on buildings in the Palestinian Territory, 2008**

Value in US \$ 1000

Region	Value of current maintenance
<b>Palestinian Territory</b>	<b>113,557.5</b>
<b>West Bank</b>	<b>72,622.4</b>
North of West Bank	32,154.3
Middle of West Bank	25,921.8
South of West bank	14,546.4
<b>Gaza Strip</b>	<b>40,935.1</b>

2008

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**Table 7: Value of expenditures on capital additions repairs and improvements on buildings  
In the Palestinian Territory by region, 2008**

Value in US \$ 1000

Region	Value of capital additions repairs and improvements	
<b>Palestinian Territory</b>	<b>301,168.4</b>	
<b>West Bank</b>	<b>297,957.3</b>	
North of West Bank	96,228.5	
Middle of West Bank	70,735.4	
South of West bank	130,993.4	
<b>Gaza Strip</b>	<b>3,211.1</b>	



2008

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**Table 8: Value of expenditures on new construction of buildings and additions in the Palestinian Territory by expenditure item and region, 2008**

Value in US \$ 1000

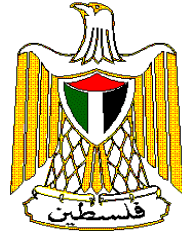
Expenditure Item	Region						
	الأراضي الفلسطينية Palestinian Territory	Gaza Strip	West Bank				
			South of West Bank	Middle of West Bank	North of West Bank		
Excavations by Machinery	12,910.0	0.0	2,749.5	6,659.4	3,501.1	12,910.0	( )
Workmanship	34,525.8	58.0	9192.7	10,426.5	14,848.6	34,467.8	
Construction Materials*	378,579.3	150.7	49,323.4	263,693.5	65,411.7	378,428.6	*
Workmanship + Materials**	80,031.4	37.1	17,117.8	30,453.7	32,422.8	79,994.3	** +
Contracting Companies	23,654.4	0.0	2,110.3	0.0	21,544.1	23,654.4	
Licensing Fees and Penalties	2,201.3	0.0	240.3	587.0	1,374.0	2,201.3	
Utilities Connection Fees	3,716.6	0.0	346.7	3,001.0	368.9	3,716.6	(.. )
Engineering Costs	4,468.7	0.0	232.4	3,225.4	1,010.9	4,468.7	
Other	74.3	0.0	28.5	14.6	31.2	74.3	
<b>Total</b>	<b>540,162.1</b>	<b>245.8</b>	<b>81,341.8</b>	<b>318,061.2</b>	<b>140,513.3</b>	<b>539,916.3</b>	

\*Construction materials purchased by owner.

\*

\*\*Construction materials purchased by contractor.

\*\*



**Palestinian National Authority  
Palestinian Central Bureau of Statistics**

**Construction Statistics  
Existing Buildings Survey – 2008**

**July, 2009**

Cover price 3 US \$

PAGE NUMBERS OF ENGLISH TEXT ARE PRINTED IN SQUARE BRACKETS.  
TABLES ARE PRINTED IN THE ARABIC ORDER (FROM RIGHT TO LEFT)



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Acting President

## **Preface**

Construction is a vital activity in the Palestinian Economy, not only for its substantial contribution in the Palestinian Gross Domestic Product (GDP) and in employment, but also for its strong interrelations with other economic activities. The construction of buildings, in particular, comprises a significant part of construction activities as a whole.

In an attempt to provide statistical data on the different aspects of this activity, the PCBS has initiated the Construction-Contractors Survey within the economic survey series since 1994. PCBS has also started producing statistics on building licenses since the first quarter of 1996.

PCBS is pleased to issue the twelfth report on Existing Buildings, 2008. This survey aimed basically to measure the output of producers engaged in construction activities; those not covered in the Construction-Contractors Survey. We refer here to self-employed skilled and unskilled workers (informal sector) who significantly contribute to the building construction activity. This significant contribution brought up the urgent need for a survey to provide more complete data on producers in construction activities. This survey provided data on the cost of construction of Existing Buildings according to different characteristics in the Palestinian Territory.

The findings of this survey will be used in compiling the national accounts for 2008 for both construction and real estate activities. We hope also that this data is of benefit to researchers and other interested parties from both public and private sectors.

**July, 2009**

**Ola Awad  
Acting President**

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## **Results Summary**

This report covers 2008 data which was collected at the beginning of the year 2009; the respondents in this survey are the owners of the buildings. The existing building survey results was as follows:

The survey results indicated that the value of constructing new buildings and additions in the Palestinian Territory in 2008 was US\$ 540.1 million, the cost of current maintenance on existing buildings was US\$ 113.6 million for 2008, while the capital repair and improvements cost for existing buildings totaled US\$ 301.2 million in 2008.

The survey results also indicated that the value of constructing new buildings and additions in the West Bank in 2008 was US\$ 539.9 million, and US\$ 0.2 million in Gaza Strip, with an increase in the West Bank by 10.2% compared with 2007. While the 2008 data could not be compared with the previous year for Gaza Strip due to the lack of data on the Gaza Strip in 2007.

The cost of current maintenance on existing buildings was US\$ 72.6 million for 2008 in the West Bank, and US\$ 40.9 million in Gaza Strip, while the capital repair and improvements cost for existing buildings totaled US\$ 297.9 million in 2008 in the West Bank, and it amounted to US\$ 3.2 million in Gaza Strip.

The final results in the West Bank showed an increase in the total cost value of current maintenance by 2.1% for the year 2008 compared with 2007, while the results showed a decrease in the total cost value of capital repair and improvements by 30.9% for the year 2008 compared with 2007. Gaza Strip 2008 data could not be compared with the previous year, due to the lack of data on that region in 2007



# Executive Summary

## 1. Introduction:

Due to the vital role of construction activities in the Palestinian Economy in terms of its capacity to create job opportunities and also for its contribution to Gross Domestic Product (GDP), PCBS had devoted important efforts to produce a comprehensive data base on construction activities which became part of its master plans since its establishment in 1993. As a result; the annual Existing Building survey was introduced and designed to capture the informal sector in construction activities. This survey is also complementary to the annual survey of the Construction Contractors Survey which deals with the formal part of construction activities.

The construction of buildings represents the bulk of construction projects taking place in the Palestinian Territory. Most of these activities are constructed by self-employed, skilled workers and small size contractors who together constitute what is called the Informal Sector in construction. This survey aims to measure the economic indicators such as the cost of construction, and the cost of new additions and other related indicators; the output of this survey depends on a special methodology designed to get the requested data by directly addressing building owners.

## 2. Objectives

- Measuring the output of the informal sector which is engaged in building construction, additions and capital and current maintenance.
- Providing data on the cost of construction of existing buildings in the Remaining West Bank and Gaza Strip by several characteristics.
- Providing data on the costs of current maintenance which is necessary for estimating the intermediate consumption of real estate activities.

## 3. Definitions

- Statistical unit: The statistical unit is the building.
- Building: the building is defined as any fixed construction that is temporarily or permanently erected on the surface of the earth or water. The building is surrounded by four walls or with at least one completed ceiling at the time of the visit, regardless of the construction material or the purpose of construction and utilization. The building might be utilized for habitation, for work, for both, vacant, closed or under construction.
- Construction Materials of External Walls:
  1. Cleaned stone
  2. Stone and concrete
  3. Concrete
  4. Cement blocks
  5. Clay adobe
  6. Old stone
  7. Other
- Utilization of the building: It refers to the way the building is currently used, regardless of the purpose of its construction which is classified as follows:
  1. Habitation only: it means that the building was used solely for residential purposes, i.e., normal buildings.

2. **Habitation and Work:** it means that some of the housing units in the building are used for habitation purposes whereas other units are used for habitation and for work. An example of this is a building which has units used for habitation purposes only, whereas other units are used for work purposes. Likewise, which a building has units used for residential purposes, except for the ground floor that consists of stores, groceries, garages, etc, is considered habitation and non-habitation building at the same time. Also, the building constructed for work purposes (e.g., factory, school, mosque ...etc.) but includes a unit permanently occupied by a household, is considered habitation and work at the same time.
3. **Work only:** it means that the building was used for work only, i.e., not occupied by any household.
4. **Closed:** it means that one household or more occupied the building but it was closed during the listing period. This applies as well to buildings used for work purposes but found closed during the listing period.
5. **Vacant:** it means that the building was used for work only, i.e., not occupied by any household.

**Important note:** If some parts of the buildings are used while other parts are vacant, closed or under construction, the current use shall be habitation only, for work only, or habitation and work, depending on case.

#### **4. Methodology**

- **Questionnaire:** The questionnaire used in this survey was designed to be as basic as the data expected to be kept by respondents.
- **Sample:** A two -stage stratified cluster random sample was used in this survey. In the first stage (295 enumeration areas) were selected out of the 4,879 PSU into which all the Palestinian Territory was subdivided for statistical purposes. In the second stage a random sample from each PSU was selected, amounting to 5,023 buildings.

#### **5. Exchange rates:**

US\$ / NIS = 3.5816

US\$ / JD = 0.7045

## 6. Main Findings

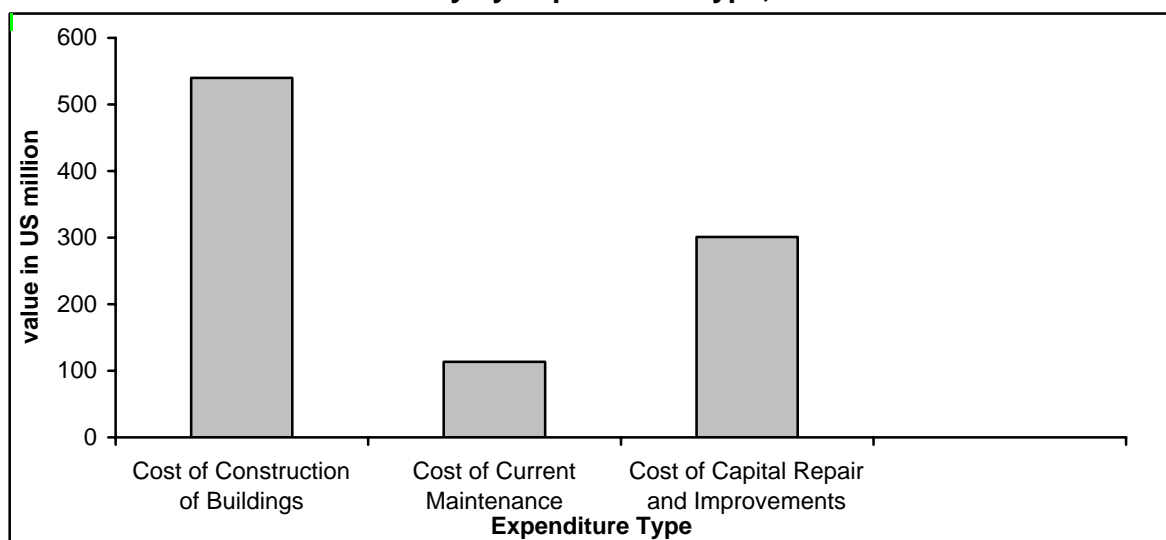
The following main indicators are derived from the existing buildings Survey 2008 in the Palestinian Territory:

Item	Values in Million US \$
<b>1. Value of expenditures of new buildings and additions in the Palestinian Territory:</b>	<b>540.1</b>
<b>A. Value of expenditures of new buildings and additions by building type:</b>	
a- Building	266.8
b- Villa/ House	108.4
c- Enterprise	20.8
d- Under construction	143.6
e- Others, including (tent, iron building, others)	0.5
<b>B. Value of expenditures on new buildings and additions by building status:</b>	
a- Completed	325.5
b- Under construction/ Under preparation	143.6
c- Used but not completed	71.0
<b>C. Value of expenditures on new buildings and additions by building utilization:</b>	
a- Residential only	175.5
b- Work only	32.8
c- Work and residential	12.6
d- Not stated	319.2
<b>D. Value of expenditures on new buildings and additions by building ownership:</b>	
a- Private	504.0
b- Governmental	28.8
c- Local Authority	2.1
d- Others, including (UNRWA, Endowment, others)	5.2
<b>2. Value of current maintenance for existing buildings</b>	<b>113.6</b>
<b>3. Value of capital improvements for existing buildings</b>	<b>301.2</b>
<b>4. Total value of expenditures on building construction and maintenance</b>	<b>954.9</b>

The survey results indicated that the value of constructing new buildings and additions in the Palestinian Territory in 2008 was US\$ 540.1 million, the cost of current maintenance on existing buildings was US\$ 113.6 million for 2008, while the capital repair and improvements cost for existing buildings totaled US\$ 301.2 million in 2008.

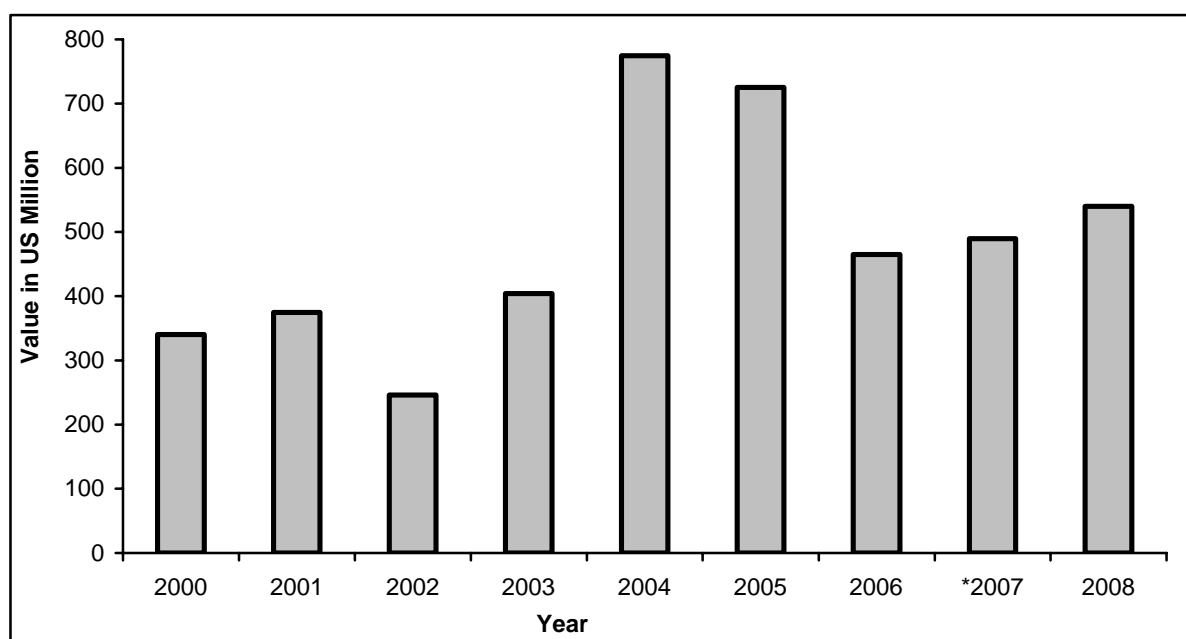
The figure below shows the expenditures distributed by expenditure type for building construction:

**Figure (1): Value of Expenditures on New Buildings and Additions in the Palestinian Territory by Expenditure Type, 2008**



Also the results of the survey indicate that in the year 2008 the value of expenditures increased compared with the years 2000-2003, 2006-2007, and decreased compared to the years 2004, 2005.

**Figure (2): Value of Expenditures on New Construction of Buildings and Additions in the Palestinian Territory for the Years 2000 - 2008**



Note: Data for the year 2007 is at the level of the West Bank due to the lack of data on Gaza Strip for this year.



## Data Quality

### 1. Accuracy of the Data:

#### 1.1 Statistical Errors:

The findings of the survey are affected by statistical errors due to using a sampling method in conducting the survey instead of the comprehensive enumeration of the units of the target population.

**Table of variance calculation in the Palestinian Territories**

Value in US\$ 1000

Variable	Estimate	Standard Error	Coefficient of Variation	95% Confidence Interval		No. of Observations
				Lower	Upper	
Value of expenditures on new construction of buildings and additions	540,162.1	17,609.4	0.03	505,621.1	574,703.1	4,053
Value of capital additions repairs and improvements	301,168.4	10,812.1	0.04	279,961.5	322,375.3	4,053
Value of current maintenance	113,557.7	2,926.5	0.03	107,818.1	119,297.0	4,053

Results showed high accuracy of variance calculation in the data, as shown in the table above.

#### 1.2 Non-Statistical Errors

These types of errors could appear in one or all of the survey stages that include data collection and data entry.

#### Main obstacles appearing in the survey:

1. Problems in maps, because the buildings were not numbered on parts of the maps.
2. There was no one to answer some questions such as construction year or costs questions in the morning period.
3. Absence of families, which forced the field workers to visit these families many times.

#### Response rate values:

- Sample size was 5,023 buildings in the West Bank and Gaza Strip, of which 233 buildings, constructed in the year 2008, were already included.
- Non- response cases were 260.
- Over coverage cases were 67.
- Net sample =  $5023 - 67 = 4,956$ .
- Non- response rate = 5.2%.

Response errors: these types of errors are related to, respondents, fieldworkers, and data entry personnel. For insuring data quality, a series of measures were taken to support accuracy of data collection and data processing through the following: with regard to fieldworkers' errors: a set of actions was taken to support accuracy of data collection through the selection of a specialized fieldwork team. The team was trained in theory and practice in the survey questionnaire completion, and all their questions were answered. Field visits were a helpful tool to test the credibility of fieldworkers, and to solve all problems that face them.

With regard to data entry errors: for insuring quality and consistency of data, a set of measures were taken for strengthening accuracy of data as preparing the data entry program before data collection to check its readiness. Also a set of validation rules were applied to the program to check consistency of data. In addition efficiency of the program was checked through pre-testing in entering few questionnaires, including incorrect information to check its efficiency, in capturing this information.

### **Comparability:**

Data from this survey can be compared with data for previous years surveys for all covered geographical areas.

## **2. Quality control procedures:**

### **2.1 Fieldwork**

- Selection of specialized fieldwork team of suitable background; the team was trained theoretically and practically on the survey questionnaire completion.
- The main fieldwork team members were selected from those who passed the evaluation test of the training course.
- Field work visits by both fieldwork and project management staff for monitoring and following up data collection process and progress of work. There was an average of two visits for each governorate. About 95% of completed questionnaires was reviewed and corrected if needed; comments and notes were directed to the team accordingly.
- Different levels of supervision and monitoring took place according to the following division:
  - Fieldworkers
  - Fieldworkers' supervisors
  - Fieldwork coordinators. (Each has responsibilities in monitoring)
- Project management receives a daily progress report about completeness and response or lack of data.
- Conducting a refresher training course during the stage of data collection to emphasize the main issues. Also to answer fieldworkers questions about issues faced in the field.
- Some buildings were visited by the researchers again to confirm the accuracy of the earlier given data. These buildings were selected randomly by drawing a random sample of 10% of the original survey sample.

### **2.2 Data processing:**

For insuring quality and consistency of data, a set of measures was taken to strengthen data accuracy as follows:

- Preparing a data entry program before data collection to check its readiness for data entry.
- A set of validation rules were applied to the program to check consistency of data.
- Efficiency of the program was checked through pre-testing by entering a few completed questionnaires, including incorrect information, to check its efficiency in capturing the information.
- Well \_trained data keyers were selected and trained for the main data entry.
- Weekly or biweekly data files were received by project management to check accuracy and consistency,; notes of correction are provided for data entry management.

### **3. Technical Notes:**

1. There could be some non-statistical errors in buildings construction and maintenance on these buildings, as a result of the long period between the interview time and the base year. In addition to that, most respondents don't have financial records.
2. Differences of results of certain indicators that can be noticed are due to approximation.
3. Inability to disseminate in annexed Jerusalem because of high relative error of indices, and the small number of observation.
4. Financial data was collected in NIS, US\$ and JD, but it was converted and published in US\$. With the use of average exchange rate during the reference period.

