

*

2002

2004

2002

.1

*

2007/7/12

.2008/11/18

/

.3

2002 24

" "
2005

(1)

1994

(1)

728

(2)

.2

" "

150-60

8

(3)

2

.(5)

1948

1948

1948

600 -100

(

143-24)

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%93

1967

(4)

"

"

1967

2000

"

"

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"

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"

"

1

(6)

:1

936	936	
782	782	
4150	2308~	
974	974	
6842	5000~	

(1). :

.4

3

1948

5860

60

(GIS)

130

Geographic Information Systems

(static and dynamic data)

1022

408

2,5

2006

World Bank,)

330

1,77

(2007

(OCHA 2006)

%48

55

%7

15

72,5

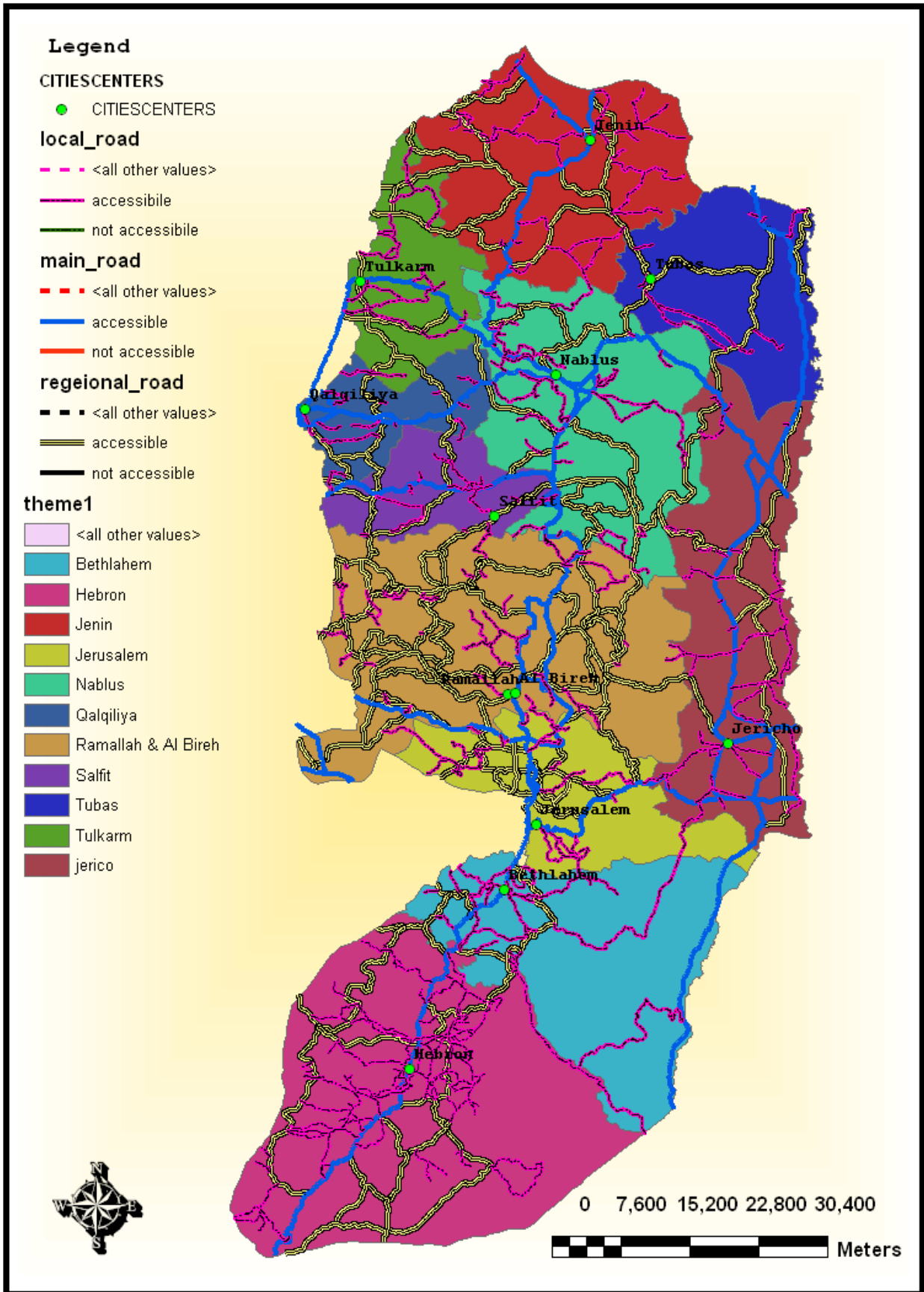
%3

%3,8

(7)2020

...

.5



(:) :2

2005/8/16

400

%95

(Trip path and distance)

TIFF

JPEG

2002

2002
GIS

Refconx

GIS
(Digitize)

(Attribute Tables / Layers)

(Attributes)

"GIS"

(Geometric Network)

(Networking Analysis)

(GIS)

GIS

.6

3

%35

%29.3

GIS

()

2

2001

%50

2000

%31

%25

%52.5

⁽⁸⁾.2005

%43 2004

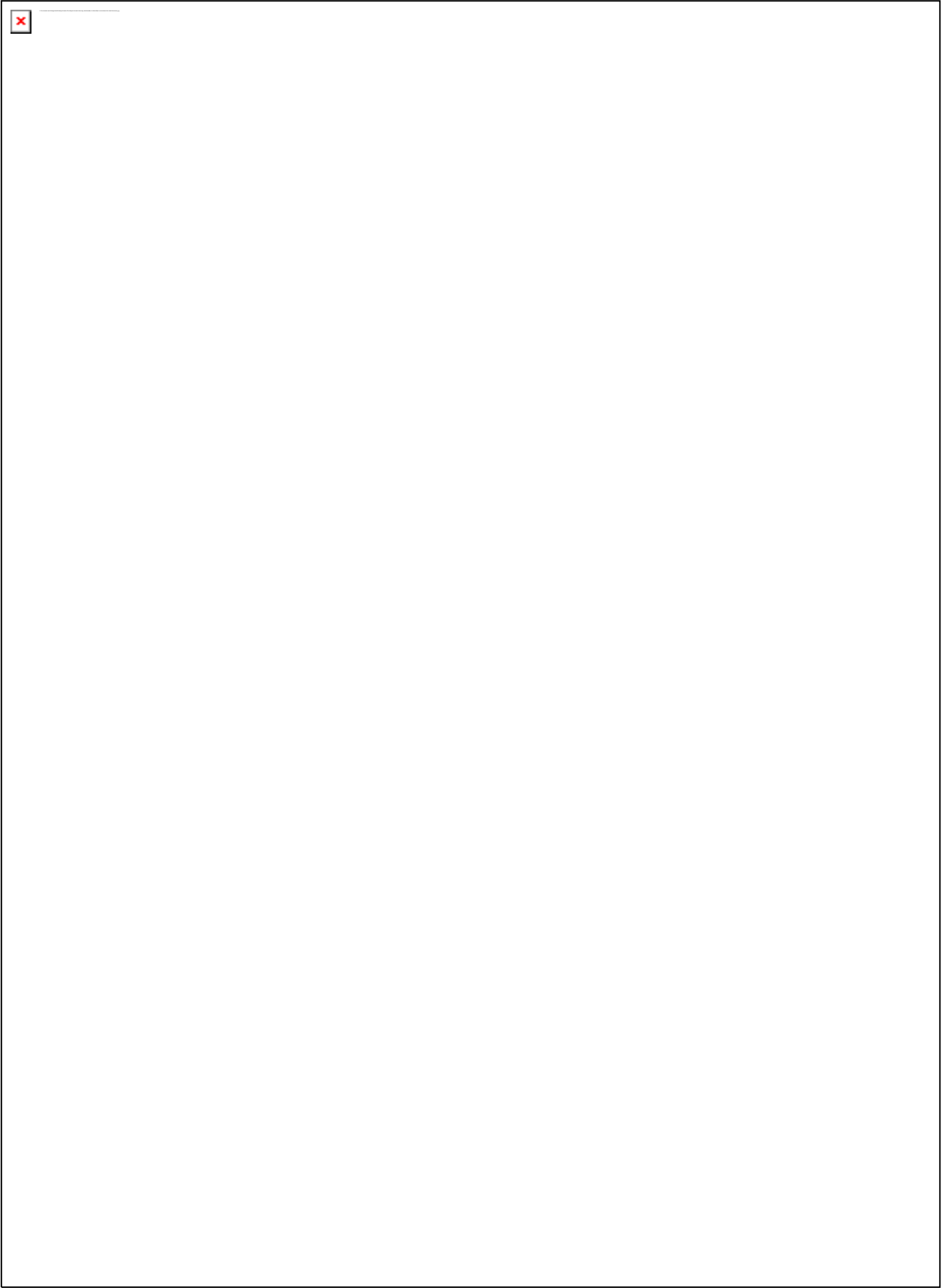
:3

:2

%		
29.25	117	
14.25	57	
35.00	140	
8.25	33	
13.25	53	
100	400	

%52.5	210	
%25	100	
%15	60	
%2	8	
%5.5	22	
%100	400	

(Access)



.(OCHA 2008) 3 :)

:4

:6

(%)		
23.5	94	
35.00	140	
32.5	130	
9.00	36	
100	400	

(GIS)

.7

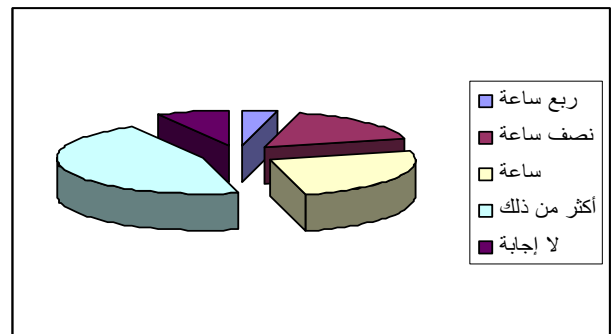
7 6

5

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7

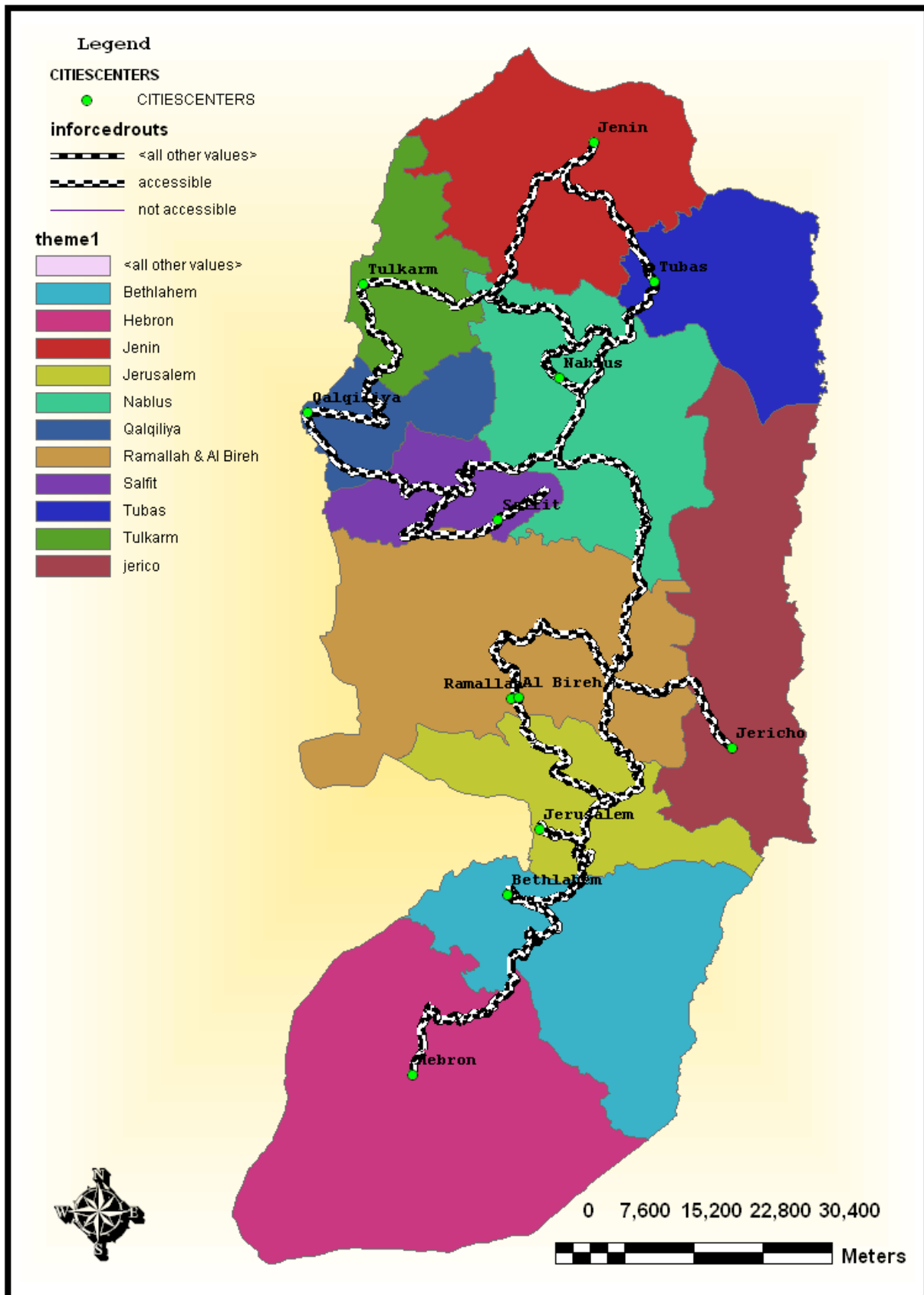
()



%60 % 5-

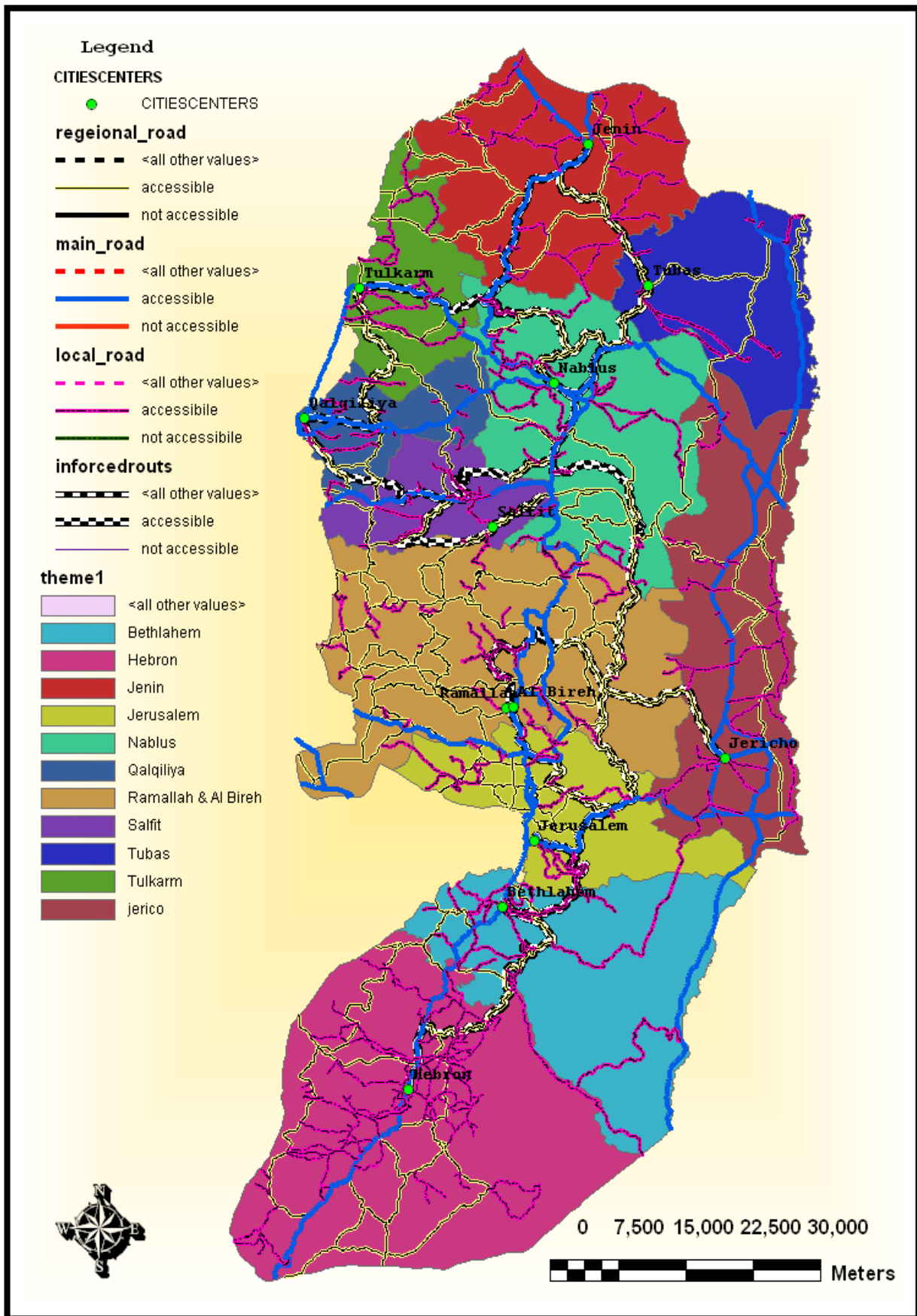
.%41

:5



(. :)

:6



(. :)

:7

:7

() (-)	()	()		
-3.08	68.42	71.5		
9.93/39.13	82.76/111.96	72.83		
24/53.21	128.5/157.71	104.5		
18.08/47.28	95.58/125.78	78.5		
21	76.1	55.1		
3.45/15.65/5.68/8.15	45.1/57.3/47.33/49.8	41.65		
16.45/6.48	48.14/38.17	31.69		
36.96/17.88	70.56/51.48	33.6		
27.67	50.34	22.67		
0.0/4.67	21.24/25.9	21.24		

:

()

) 72

(\$17

)

0.49

.(...

0.49

4.9 (10)

%71

%6.81

%.140

8

%120 %12

%68

9

:8

() (-)	()	()		
0.11	1	0.89		
0.27/0.71	1.18/1.62	0.91		
0.64/1.09	1.94/2.39	1.3		
0.61/1.06	1.5/1.95	0.89		
0.45	1.14	0.69		
0.13/0.28/0.15/0.23	0.68/0.8/0.67/0.75	0.52		
0.29/0.16	0.69/0.56	0.4		
0.61/0.31	1.03/0.73	0.42		
0.41	0.72	0.31		
0.0/0.1	0.3/0.4	0.3		

()

:9

(-)							
3.7	1	1	37	12	45	34	11
10/26.6	3.1/8.6	6.5/25.5	44.3/60.9	14.8/20.3	53.8/72.8	34	12
23.8/40.4	7.6/13.1	15.6/34.6	72.9/89.5	24.3/29.8	83.5/102.5	49	17
19.5/36.1	6.5/11.7	11.8/30.8	56.4/73	18.8/24.3	62.8/81.8	37	13
17	5.3	14	43	14	50	26	9
8.4/4.8/10.4/5.4	2.7/1.4/2.3/1.7	5.4/2.3/10.2/3.8	28/24.4/30/25	9.4/8.1/10/8.4	32.4/29.3/37.2/30.8	20	6.7
37.1/22.7	11.9/7.1	34/17.8	25.8/21	8.6/7	31.3/25	15	5.1
22.9/11.6	7.6/3.7	24.1/11.6	38.7/27.4	13/9.1	46/33.5	16	5.4
15	5	18	27	9	33	12	4
0.0/3.7	0.0/1.3	0.0/3.2	11.1/14.8	3.7/5	13.8/17	11	3.7

	.1	%9.3	%8.4	2005	2004
				%10.1	
		.(15) %6.7	%5.75		
	.2	:			.1
	.3				.2
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					.4
	(4)				
	(5)				
. 2006/3/30					(1)
	(6)	.()			(2)
.()					(3)
	(7)				
The World Bank, West Bank and Gaza.	(8)				

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 - 1998
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The Impact of Israeli Apartheid Measures on Major Arterial Roadway Network in the West Bank Area

*Osama A. Abaza **

ABSTRACT

In April, 2002 the Israeli government started the construction of the “Segregation Wall” a long the “green line” through confiscation of Palestinian land and separating residential, agricultural, commercial, and industrial areas within the West Bank area. This was done against all international and United Nations laws which forbids the occupying force of such actions; this was consolidated through the decision of the International Court of Justice (ICJ) in the year 2004 declaring that the construction of the Wall is contrary to international law. The Israelis had another turn of apartheid measures through the military order of 2002 for the construction of dual roadway network in the Palestinian territories of the West Bank, one for the Israelis and settlers (the occupying force) using the main state arterial roadway network and the other to be used by the occupied people of Palestine using the minor and village access roads.

The negative impacts of those measures are clear on the ground through the confiscation of Palestinian land; impair the movements of people goods and services between cities and within the cities themselves, and isolating major Palestinian cities from each other. In addition, those measures had a negative impact on the livelihood of Palestinian living in the area.

This research study focuses on collecting and analyzing data with regard to the Palestinian roadway network before and after the apartheid measures imposed on the Palestinian residents of the West Bank. The study showed that the measures imposed on the Palestinian residents had a significant negative economical, social, educational, and health impacts. Those measures will directly increase the average tripe length and the individual expenditure on transportation. In addition, the adverse impact caused a significant decrease in the number of trips per capita as well as inefficient utilization of the individual daily working hours. The study recommends public awareness of those apartheid measures and capitalizes on public and international opinion to confront those measures.

Keywords: Roadway Network, West Bank, Apartheid Measures, Impacts, Trip, Length, Time, Cost.

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