

"

"

..

:

" "

**-1**

. [17], [11], [10]

( )

:

" "

-2

:  
 (Hazard) -  
 .(Vulnerability) -  
 .(Exposure) -  
 .(location) -  
 ) ( ) :  
 ) ( :  
 6.5 6 ) ( :  
 (Seismic Vulnerability)  
 (Risk) ( )  
 : (Risk Analysis)  

$$\frac{(\text{Vulnerability}) \times (\text{Hazard})}{(\text{Capacity})} = (\text{Risk})$$
 :  
 :*Hazards* -  
 :*Risk* -  
 : -

( [20],[19],[16] )

1991 :  
1999  
1990 :  
1999  
1990 :  
1995  
1989 :  
1994  
2005 :  
[20]  
2001 :  
2001 :  
1985 :  
2001

(Amplification) (Liquefaction) :  
(2) (1) (Landslides)  
[8],[1]



(2005)

:(2)



(2005 )

:(1)

.(Land Use Policy)

:

[20],[15],[14],[10]

[8],[7],[6],[3]

6.5 6

)

(

" "

1

)

.(

[3]

:(1)

9 :			8 :			7 :			
3	4	5	3	4	5	3	4	5	
15%	23%	15.6%	18%	21%	5.9%				
-	-	-	19%	19%	4.8%	-	-	-	
-	-	-	17%	22%	6.5%	-	-	-	
-	-	-	19%	24%	6.75%	-	-	-	
-	-	-	21%	20%	5.1%	20%	5.1%	-	
-	-	-	18%	22%	6.15%	22%	6.15%	-	
-	-	-	19%	23%	6.3%	-	-	-	
:(Damage of grade 1)									
)									
:									
:									
:									
:									
:									
12 :									

- 3

[19],[14],[10],[5]

:

-

-

-

-

-

:

(Cyclical Planning Process)

( Inception of Disaster Management) : \_\_\_\_\_  
( )

(Risk Assessment) / : \_\_\_\_\_

(Risk Assessment)

(Level of Acceptable Risk) : \_\_\_\_\_

Preparedness ) " " : \_\_\_\_\_  
(and Mitigation Planning

(Testing the plan) : \_\_\_\_\_

(Feed Back) : \_\_\_\_\_

(Risk Maps)

( )

- 4

[20],[17],[13],[10],[5],[4],[2]

:

:

-

-

1999 2005 1999 - 1985  
(3 )  
(4 )

:

-

[20] (4 3 )

-

(2) (1) [20]

" "

( ) ( )



18 (1999) (4)



(1985) (3)

( )

-  
-  
:

) :  
200 (5) ( )  
:

**1-5**

" ( .. ) "

(5)

:

9

7

-2002

:

2003

2004/2/11

(6)

[7]

**2-5**

(5 )

( )

**3-5**

10-8

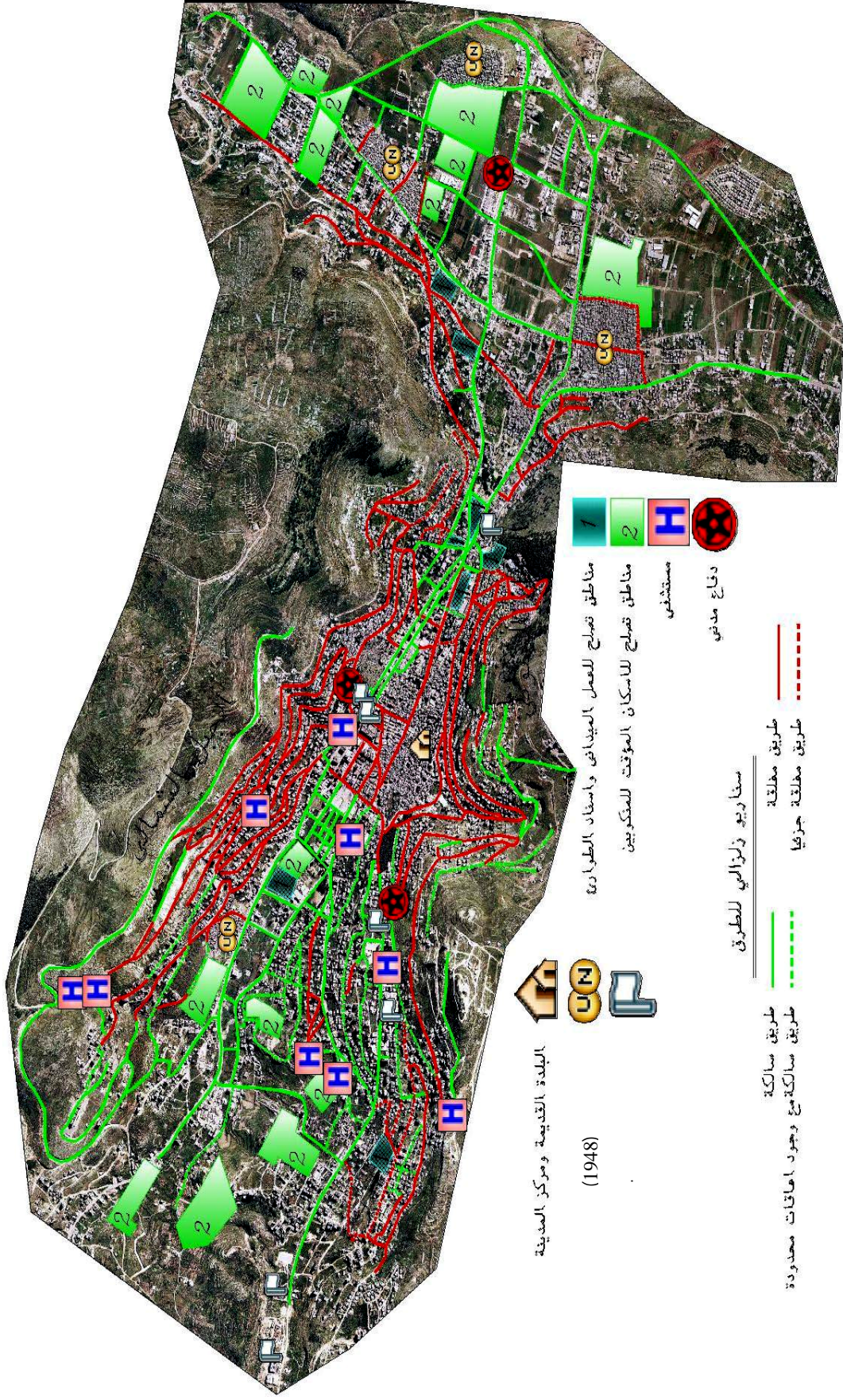
(5 )

:

-

-





البلدة القديمة ومركز المدينة

(1948)



مناطق تصفح للعمل الميداني واستناد الطوارئ

مناطق تصفح للاسكان المؤقت للمكثوبين

مستشفى

دفاع مدني

ستاريو زلزالي للطرق

طريق سالكة

طريق سالكة مع وجود اعاقات محدودة

طريق مغلقة

طريق مغلقة جزئيا

:(5)



(2004/2/11 )



:(6)

.(2 )

8-6

%5-3

4-5

48 - 24

( :  
( ) )

-  
-  
-  
-

**- 6**

( )

[20],[17],[13]

( 7 6 )

(Risk Maps)

:

( )

-  
-  
-  
-

:

-  
-  
-  
-

" (1998 ) [1]

" 192 – 163 " (1999) [2]

" (2007) [3]

" (1996) [4]

" (2006) [5]

977-387-059-5

[6] AL – Dabbeek, j., and Abdel Hakeem, J., (2003) “Vulnerability and Expected Seismic Performance of Buildings and lifelines in Palestine,” Lliving with Risk, Expert Workshop, UNESCO, Cairo, Egypt, Dec.2003

[7] Al-Dabbeek, J., and Kilani, R., (2005).”Dead Sea Earthquake of 11 February 2004, ML 5.2: Post Earthquake Damage Assessment in the West Bank, Palestine,” The International Earthquake Engineering Conference, Nov. 2005, Jordan.

[8] El-Kelani, R., and Al-Dabbeek, J., “3-Dimensional Mapping of a Landslide in Nablus City, Palestine: A Preliminary Risk Assessment,” Urban Engineering Conference, in press, 12<sup>th</sup> –13<sup>th</sup> October 2005, Lille, France.

[9] Gruenthal, G., Musson, R., M., W., Schwarz, J., and Stucchi, M., (Editors) “European Macroseismic Scale 1998,” European Seismological Commission, 1998, Vol. 15.

[10] UNESCO, “Participation in Structural Upgrading, ”Project: Training Material for Disaster Reduction, 1995, Delft, Netherlands.

[11] EERI, “Kocaeli, Turkey, Earthquake of August 17, 1999: Reconnaissance Report,” Earthquake Spectra Journal, Dec. 2000, 16, 2000-3, Oakland, CA, USA.

[12] EERI (1996). "Scenario for a Magnitude 7.0 Earthquake on the Hayward Fault", Report, EERI Publication No. HF-96.

[13] Villacis, C., and C. Cardona, "Case Studies in Latin America", RADIUS: Risk Assessment Tools for Diagnosis of Urban Areas Against Seismic Disasters. Geneva, Switzerland: IDNDR Secretariat, United Nations, 2000.

[14] National Institute of Building Sciences (NIBS), HAZUS Technical Manual Federal Emergency Management Agency: 1997 Volume. I, pp. 5-1 to 6-35

[15] National Institute of Building Sciences (NIBS), HAZUS Technical Manual Federal Emergency Management Agency: 1997 Volume III, pp.10-1 to 10-20.

[16] Sheppard, P., (1988). "Estimation of Expected Seismic Vulnerability". Koridze, A Seismic Risk Assessment and Design of Building Structures, (UNESCO), , England.

[17] International Federation of Red Cross and Red Crescent Societies IFRCRCS, (1999), World Disaster Report Geneva, Switzerland Academiques, Paris.

[18] Walter, H., Bagher, M., and Jodi, M., (1998). “Seismic Zonation,” A Closing Activity of the International Decade for Natural Disaster Reduction. Monograph, Presses.

[19] Yuxian Hu, (1999). “Seismic Risk Assessment and Disaster Management, “International Training Course 2000, Potsdam, Germany.

[20] Earthquake Engineering Research Institute, (1973-2006). Newsletters and Reconnaissance reports:

1988	1985	1971	(EERI)					[20]
1999	1994		199	1990	1990	1989		
		2003	2003	2001	2001	1999	1999	
				.2006	2005	2004 ( )		