Analyzing the Effects of Abandoned Houses on Neighborhood Satisfaction in the Walled City of Famagusta

Maryam Hafezi

Submitted to the Institute of Graduate Studies and Research
In the partial fulfillment of the requirements for the Degree of

Master of Science in Architecture

Eastern Mediterranean University
January 2014
Gazimağusa, North Cyprus
Approval of the Institute of Graduate Studies and Research

Prof. Dr. Elvan Yılmaz
Director

I certify that this thesis satisfies the requirements as a thesis for the degree of Master of Science in Architecture.

Prof. Dr. Özgür Dinçyürek
Chair, The Department of Architecture

We certify that we have read this thesis and that in our opinion, it is fully adequate in scope and quality as a thesis for the degree of Master of Science in Architecture.

Assoc. Prof. Dr. Beser Oktay Vehbi
Supervisor

Examining Committee

1. Assoc. Prof. Dr. Mukaddes Faslı

2. Assoc. Prof. Dr. Beser Oktay Vehbi

3. Asst. Prof. Dr. Nazife Özay
ABSTRACT

Housing abandonment is one of the social and physical problems in some of neighborhoods than others today. Housing abandonment emerged as problem in such areas due to wide range of factors such as social, economic and physical forces and public policies.

Neighborhood is a place where people and residents spend their majority of life times in. Accordingly, it is a small community that people are gathered in and sharing their emotional feelings and things. Both in modern and tradition cities, neighborhood satisfaction depends on physical, social and economical overall condition of specific neighborhood. In addition, when housing abandonment appears in a neighborhood, it dramatically affects on neighborhood satisfaction that heading into decline of quality of life as well as neighborhood. Not only physical condition, social and economic conditions of the neighborhood had negatively affected by the housing abandonment. Any problems that can happen in these three structures of a neighborhood are directly decreasing the neighborhood satisfaction among residents. Accordingly, main aim of this study is to analyze the effects of housing abandonment on the neighborhood satisfaction.

For this study, Walled City of Famagusta as a one of important historical and traditional part of the Famagusta City, is selected as a case study area. This thesis is carried on three residential districts among nine districts that each district has a dense housing pattern. Also, existence of residential abandonment in the selected districts is another reason for this selection. Thus, the case study areas are analyzed through
series of analyses and the effects of housing abandonment on neighborhood satisfaction in Walled City is tried to be achieved.

Accordingly, this thesis is composed of five chapters. The first chapter is included with introductory part, that relates to aim and objectives and method of the study. Chapter two defines the abandonment issue, its negative consequences and reasons. Chapter three explains the neighborhood satisfaction and its indicators. As a result of the theoretical part, it is achieved that reasons of housing abandonment relies on the neighborhood satisfaction. In the fourth chapter, case study areas are analyzed by using the indicators that are achieved at the end of the literature review in chapter three. Physical and social analyses technique-questionnaire survey is used for gathering data from the selected districts. Conclusion and recommendations are given in the fifth chapter.

The findings from physical and socio-economic analysis show that, the physical and socio-economic conditions of neighborhood give impetus to increase the housing abandonment and at the same time decrease the neighborhood satisfaction. It means that residential districts of Walled City have highly deteriorated façade and structural condition, locational obsolescence, lack of environmental standards, fair level of place attachment, lack of safety and health and moderate level of new houses in housing market. Accordingly, these negative impacts are causing housing abandonment in the neighborhood. Due to this growth of housing abandonment that is obtained, from the results of analysis the residents are not satisfied to live in the neighborhoods.
**Keywords:** Historical neighborhood, housing abandonment, neighborhood satisfaction, Walled City of Famagusta
ÖZ

Terk edilmiş konutlar bazı mahallelerde sosyal ve fiziksel problem olarak görülmektedir. Bu mahallerde terk edilmiş konutların problem olarak görülmesi farklı sosyal, ekonomik ve fiziksel baskılar ve devlet politikaları nedeni ile ortaya çıkmaktadır.


Bu tez kapsamında Mağusa kentinin tarihi ve geleneksel merkezi olan Surları çalışma alanı olarak seçilmiştir. Terk edilmiş konutların yoğun olduğu üç konut mahallesi tüm surlarıçerinde bulunan dokuz mahalle arasından seçilmiştir. Böylece, seçilen üç konut mahallesinde yapılan bir seri analizler sonucu, buradaki konut terk edilme sorununun mahalle memnuniyetine etkisi elde edilmeye çalışılmıştır.

Yapılan fiziksel ve sosyal analizler sonucunda konut mahallelerinin fiziksel, sosyal ve ekonomik durumları, buralarda meydana gelen konut terk edilmesi hızlanmıştır ve aynı zamanda mahalle memnuniyeti azalmıştır. Bu sonuçlara göre Surlarıçi Mağusa’da bulunan konut mahallelerinde yüksek oranda cephe ve strüktür eskimesi, bölgesel eskime, çevresel standartların eksikliği, yer/aidiyet duyununun azlığı, sağlık ve emniyet gibi sosyal ihtiyaçların eksikliği gibi sorunlar görülmüştür. Tüm bu problemlerin var olduğu bu alanlarda yaşanların, memnuniyetsizliklerinin olduğu da ortaya konmuştur.

Anahtar kelimeler: Tarihi mahalle, konut terk edilmesi, mahalle memnuniyeti, Surlarıçi Mağusa.
To My Lovely Family…
ACKNOWLEDGEMENT

I would like to express the deepest appreciation to my supervisor Assoc. Prof. Dr. Beser Oktay Vehbi. She continually and convincingly conveyed a spirit of adventure in regard to research and scholarship and an excitement in regard to teach. Without her guidance and persistent help this thesis would not have been possible.

I am also grateful and thankful from my parents and parents-in-law, who supports me emotionally from long distance and their help to providing this opportunity to complete my education. Also to my deepest thank to my dear husband, Arash Vahedi for his endless love. He is always cheering me up and standing by me through the good and bad times.

My appreciation also goes to my all friends, amongst them, Halleh N.Riahi, Negin Almasi and Aref Arfaei, also Aminreza Iranmanesh for his helps in SPSS program.
# TABLE OF CONTENTS

ABSTRACT ........................................................................................................... iii

ÖZ ......................................................................................................................... vi

DEDICATION ...................................................................................................... viii

ACKNOWLEDGEMENT ......................................................................................... ix

LIST OF FIGURES ............................................................................................... xiv

LIST OF TABLES ................................................................................................. xvii

1 INTRODUCTION ............................................................................................... 1

1.1 Background Information ............................................................................. 1

1.2 Problem Statement ...................................................................................... 3

1.3 Aim and Objectives ..................................................................................... 4

1.4 Limitations ................................................................................................... 5

1.5 Methodology ................................................................................................. 6

2 ABANDONED/VACANT HOUSES .................................................................. 9

2.1 Introduction .................................................................................................. 9

2.2 Definition of Abandoned/Vacant Houses ................................................... 9

2.2.1 Residential Abandonment ..................................................................... 11

2.3 Reasons of Abandonment .......................................................................... 15

2.3.1 Physical Reasons .................................................................................. 15

2.3.1.1 Aesthetic Quality ......................................................................... 15

2.3.1.2 Locational obsolescence ............................................................... 17

2.3.1.3 Contaminated Sites ...................................................................... 19

2.3.2 Socio-economic Reasons ...................................................................... 19
2.3.2.1 Place Attachment ................................................................. 20
2.3.2.2 Crime ................................................................................. 22
2.3.2.3 New Houses in Housing Market ............................................. 23
2.4 Negative Consequences of Residential Abandonment ...................... 25
  2.4.1 Physical Consequences .......................................................... 25
  2.4.2 Social Consequences ............................................................. 26
  2.4.3 Economic Consequences ....................................................... 29
2.5 Summary of the Chapter ................................................................ 31

3 NEIGHBORHOOD SATISFACTION .................................................. 33
  3.1 Introduction ............................................................................. 33
  3.2 Neighborhood ......................................................................... 33
    3.2.1 Neighborhood Satisfaction .................................................. 35
  3.3 Neighborhood Satisfaction Indicators .......................................... 37
    3.3.1 Physical Satisfaction ............................................................ 38
    3.3.1.1 Physical Decay .............................................................. 39
    3.3.1.2 Aesthetic Quality ........................................................... 39
    3.3.1.3 Housing Quality ............................................................ 40
    3.3.2 Economic Satisfaction .......................................................... 41
    3.3.2.1 Level of Income ............................................................ 41
    3.3.2.2 Home Value ................................................................. 41
    3.3.3 Social Satisfaction ............................................................... 42
    3.3.3.1 Social Ties With Neighbors ............................................. 42
    3.3.3.2 Crime and Safety ............................................................ 43
    3.3.3.3 Length of Stay ............................................................... 44
    3.3.3.4 Homeownership ............................................................ 44
3.4 Summary of the Chapter .......................................................................................... 45

4 CASE STUDY APPLICATIONS: DATA COLLECTION AND ANALYSIS

METHODS .................................................................................................................. 49

4.1 Introduction ........................................................................................................... 49

4.2 An Overview of the Historical Development of the Walled City of Famagusta
................................................................................................................................. 49

4.2.1 Districts of The Walled City of Famagusta .................................................. 53

4.3 Selection of the Case Study Areas ....................................................................... 59

4.4 Methodology of the Analysis of Case Study .................................................... 60

4.4.1 Analysis of Physical Environment .................................................................. 61

4.4.2 Analysis of Socio-economic Environment .................................................... 64

4.5 Analysis of Physical Indicators For Neighborhood Satisfaction .................... 66

4.5.1 Analysis Of Aesthetic and Housing Quality of Houses and Physical Decay
................................................................................................................................. 66

4.5.1.1 Deteriorated Façade Analysis in Residential Districts ......................... 67

4.5.1.2 Poor Maintenance and Upkeep Analysis in Residential Districts ....... 69

4.5.1.3 Abandoned/Vacant Buildings in Residential Districts ....................... 71

4.5.1.4 Physical Disorder of Abandoned/Vacant Houses .................................. 71

4.5.1.5 Physical Undesirable Effects of Abandoned/Vacant Houses on Neighborhood Satisfaction ................................................................. 74

4.5.2 Locational Obsolescence Analysis ............................................................... 75

4.5.2.1 Quality of Location .................................................................................. 75

4.5.2.2 Market Obsolescence ............................................................................. 80

4.5.2.3 Decreasing in Housing Demand ............................................................. 80

4.5.3 Contaminated Sites ....................................................................................... 81
4.6 Analysis of Socio-economic Indicators for Neighborhood Satisfaction........83

4.6.1 Level of Place Attachment........................................................................83

4.6.1.1 Age.........................................................................................83

4.6.1.2 Education Level ...........................................................................88

4.6.1.3 Level of Homeownership............................................................90

4.6.1.4 Length of Stay ...........................................................................91

4.6.1.5 Neighborhood Income Level....................................................93

4.6.1.6 Level of Social Cohesion (Social contact).................................93

4.6.1.7 Home Value ............................................................................96

4.6.2 Level of Safety and Health................................................................97

4.6.2.1 Neighborhood Safety ...............................................................97

4.6.2.2 Neighborhood Health...............................................................99

4.6.3 Rate of New Housing Growth.........................................................100

4.7 Research Findings................................................................................106

4.8 Summary of the Chapter .....................................................................109

5 CONCLUSION AND RECOMMENDATIONS........................................110

5.1 Introduction..........................................................................................110

5.2 Recommendations for Improving Physical and Socio-economic Satisfaction in
the Walled City ..........................................................................................112

5.3 Agenda for Future Research.................................................................114

REFERENCES............................................................................................116

APPENDICES..............................................................................................125

Appendix A: Questionnaire Survey Samples.............................................126
LIST OF FIGURES

Figure 1.1: Residential districts in the Walled City of Famagusta ...................... 6
Figure 2.1: An abandoned house in the Walled City of Famagusta, photo by author 11
Figure 2.2: An abandoned house in Istanbul, URL.1 .......................................... 12
Figure 2.3: Abandonment has three distinct but related aspects (Hillier, Culhane, Smith & Tomlin, 2003) ................................................................................. 14
Figure 2.4: An abandoned house and negative aesthetic contribution in the Walled City of Famagusta, photo by author ................................................................. 26
Figure 2.5: Trash and garbage accumulate in abandoned house, URL.2 .................. 27
Figure 2.6: Waste materials and trash in an abandoned house in the Walled City of Famagusta, photo by author ................................................................. 28
Figure 2.7: Deteriorated façade condition in the Walled City of Famagusta, photo by author ........................................................................................................... 16
Figure 2.8: Physical disorder (poor façade condition, broken windows and graffiti), URL.3 ............................................................................................................. 17
Figure 4.1: Othello Tower, URL, 4 ........................................................................ 50
Figure 4.2: St. Nicholas cathedrals ...................................................................... 50
Figure 4.3: Urban morphology in Lusignan period. (Doratlı, et. al., 2003) ........... 51
Figure 4.4: Urban morphology in british period. (Doratlı, et.al., 2003) ........... 51
Figure 4.5: Districts of the Walled City of Famagusta (Famagusta Municipality Revitalization Report 2005, edited by author 2013) ........................................ 54
Figure 4.6: District 1, Dynamic Area .................................................................. 55
Figure 4.7: District 1, Lala Mustafa Pasa mosque and Namik Kemal square, public space and cultural and historical area .................................................... 55
Figure 4.8: District 1, Istiklal road, commercial area ................................................. 55
Figure 4.9: District 2, residential area ................................................................. 56
Figure 4.10: District 3 .................................................................................. 56
Figure 4.11: District 4 .................................................................................. 57
Figure 4.12: District 6, Cathedral of St. George ......................................................... 58
Figure 4.13: District 7, Carmelites Church ruins ....................................................... 58
Figure 4.14: District 8, walls, ditch and towers ......................................................... 59
Figure 4.15: District 9, harbor ..................................................................... 59
Figure 4.16. Façade condition analysis for deteriorated façade in residential districts ................................................................................................................................. 68
Figure 4.17. Façade condition analysis for deteriorated façade in residential districts ................................................................................................................................. 70
Figure 4.18. Abandoned/Vacant Buildings In Residential Districts ...................... 72
Figure 4.19: Physical disorder of abandoned/vacant houses ....................................... 73
Figure 4.20: An abandon house with no door, broken window, deteriorated façade and structure and trash inside ......................................................................................................................... 74
Figure 4.21: An abandon house without door and trash inside.................................. 74
Figure 4.22: Physical undesirable effects of abandoned/vacant buildings in three districts ................................................................................................................................. 75
Figure 4.23: Location of Walled City in Famagusta City (Famagusta Municipality Revitalization Report 2005). ............................................................................................................ 76
Figure 4.24: Location of the selected districts, accesses from the outside of walls and entrance gates in the Walled City (Famagusta Municipality Revitalization Report 2005, edited by author 2013). ................................................................. 76
Figure 4.25: Akkule gate (Land gate), main entrance to district 2 and 3 ............... 77
Figure 4.26: Land use analysis for quality of location................................. 78
Figure 4.27: Desdemona Park, adapted from Famagusta Revitalization Report 2005) .................................................................................................................. 79
Figure 4.28: Canbulat gate (Sea gate)............................................................... 79
Figure 4.29: Level of housing demand in the Walled City of Famagusta......... 81
Figure 4.30: Contaminated sites analysis....................................................... 82
Figure 4.31: Age in three districts................................................................. 84
Figure 4.32: Sex in three districts ................................................................. 85
Figure 4.33: Marital Status in three districts.................................................. 86
Figure 4.34: Employment Status in three districts........................................ 87
Figure 4.35: Nationality in three districts ...................................................... 88
Figure 4.36: Education level in three districts .............................................. 89
Figure 4.37: Tenure in three districts ........................................................... 91
Figure 4.38: Period of habitation in three districts....................................... 92
Figure 4.39: Neighborhood income level in three districts.......................... 93
Figure 4.40: Social contact in three districts................................................. 94
Figure 4.41: Level of happiness in three districts........................................ 95
Figure 4.42: Level of home value in the Walled City.................................... 97
Figure 4.43: Safety in three districts ............................................................ 98
Figure 4.44: Health in three districts .......................................................... 100
Figure 4.45: Level of housing growth in housing market............................. 101
Figure 4.46: Reasons of living in three districts ......................................... 102
Figure 4.47: Negative points of neighborhood in three districts............... 104
Figure 4.48: Neighborhood quality in three districts................................... 104
Figure 4.49: Overall neighborhood satisfaction in three districts............ 105
LIST OF TABLES

Table 1.1: Methodology of research .................................................................................. 8
Table 2.1: Reasons of housing abandonment .................................................................. 25
Table 2.2: Negative consequences of abandoned houses ................................................ 31
Table 3.1: Neighborhood Satisfaction Indicators: .......................................................... 45
Table 3.2: Relationship between the reasons of the housing abandonment and the indicators of the neighborhood satisfaction: ................................................................. 47
Table 3.3: Relationship between housing abandonment and neighborhood satisfaction ................................................................................................................................. 47
Table 4.1: Meaning, measurement units of each selected indicators for housing abandonment and neighborhood satisfaction ................................................................. 62
Table 4.2: Total number of completed questionnaires according to three districts. ... 66
Table 4.3: Deteriorated façade analysis in residential districts ....................................... 67
Table 4.4: Poor maintenance and upkeep in residential districts ................................... 69
Table 4.5: Cross tabulation between age and districts ..................................................... 84
Table 4.6: Cross tabulation between districts and sex .................................................... 85
Table 4.7: Cross tabulation between marital status and districts ................................... 86
Table 4.8: Cross tabulation between age and education ................................................ 90
Table 4.9: Cross tabulation between nationality and tenure .......................................... 91
Table 4.10: Cross tabulation between tenure and habitation ......................................... 92
Table 4.11: Cross tabulation between Social Contacts and Period of Habitation ......... 95
Table 4.12: Cross tabulation between How many years have you live in this house? and, Are you happy to live in this neighborhood? ........................................................................ 96
Table 4.13: Cross tabulation between Age and Are you feeling safe by living in this neighborhood that there are abandoned/vacant houses? ................................................................. 99

Table 4.14: Cross tabulation between the tenure and the most important consideration to prefer to live in neighborhood .................................................................................. 103

Table 4.15: Cross tabulation between quality of the building in neighborhood and satisfaction with the quality of life in neighborhood ....................................................... 106

Table 4.16: Overall results of physical analysis ...................................................................... 107

Table 4.17: Overall results of socio-economic analysis .......................................................... 108
Chapter 1

INTRODUCTION

1.1 Background Information

Historical urban neighborhoods as part of bigger set, represent and imitate elements of history of the city social, cultural, economical, political and architectural heritage. Similar to areas of historical interest, historic urban neighborhoods are also only witness of their time. Historic buildings and historic urban fabric, the legacy of past heritage of earlier civilizations and the remains are valid faces of cultural historic urban neighborhoods (Hoskara, Dorathı, Oktay & Faslı, 2007; Oktay & Hoskara, 2009).

In one hand, in most of the countries historical neighborhoods are spaces of treasure, fortune and chances for being a center of different activities, vibrant place and cultural events, and in the other hand they are places of failure, decline and deterioration. Low level of income, education, lack of aesthetic quality, health and safety problems may lead to decline historic areas. In the other words, changing physical, economic and social structures of such environments affects on people and their level of satisfaction to negative and destructive hosing and urban poor (Oktay & Hoskara, 2009).

Furthermore, buildings, streets, squares and people are elements that identified by historic neighborhoods. Accordingly, people and buildings are component of each
neighborhood (Doratlı, 2007). Therefore, abandoned houses are part of this component that negatively affects the satisfaction of the users and physical image of their context. Housing abandonment is a product of negative effects of the physical condition and disorder, image of the buildings and poor structure situation. Also, social disorder, safety and health problems are another reasons for housing abandonment. Lastly, economic losses, market obsolesces that leads to disinvestment in the neighborhood. Therefore, moving, leaving from historic residential districts is one of the main social problems in housing areas. The housing abandonment happens when housing units are detached from housing stock (Keenan, Lowe& Spencer, 1999).

Once residential units become no useful and beneficial any more for owners, conclusively, they decide to leave the property to be abandoned instead of trying to maintain and up keeping and giving back to the housing market. Beside, they refuse to take any active steps to revitalize and restoration for solving abandonment problem. On the other hand, there may be some residents that financially are not being able to effort for maintaining; inevitably they may still to live in the neighborhood. Accordingly, it does not mean that they are satisfied to settle in (Keenan, Lowe& Spencer, 1999).

Neighborhood satisfaction is a critical component of life satisfaction. Contribution to the life satisfaction and dissatisfaction is affected by background variables of individual and household. However, the influence of neighborhood satisfaction was limited understanding of the physical environment (Kweon, Ellis, Leiva, Rogers, 2010). Therefore, one of the important life satisfaction factors is neighborhood satisfaction, satisfying from the environment that mostly spending daily and social
time of life in. For neighborhood satisfaction, there are various variable that influence it, such as firstly history and background of residents secondly, physical, social and economical condition of the neighborhood (Kwevon, Ellisa, Leiva, Rogers, 2010). Abandoned buildings are a part of the neighborhood, and accordingly these building are also effects to the level of the neighborhood satisfaction.

1.2 Problem Statement

The Famagusta city is a second biggest city in the Northern Cyprus with a historic core but also with a harbor. The Walled City has many significant remains of historical, architectural and cultural heritage are surrounded (Oktay, Rustemmi & Marans, 2009).

Before the deterioration of traditional life, the concept of neighborhood was very important in the Walled City like as well as in Northern Cyprus and Anatolia. Neighborhood was not just a physical entity within the city, but also was a social entity providing the economic and social collaboration between neighbors. Since it was very compact neighborhood cohesion and strong community and extended families were connected with their neighbors and neighborhoods (Oktay, 2002; Oktay&Marans, 2010).

Neighborhood sense and meaning used to be important before declining of traditional life in the Walled City of Famagusta, likely in Northern Cyprus. Neighborhood concept in a dense and compact housing units also with strong relationship between families and neighbors giving this chance to shearing their social and economical life with together (Oktay, 2002; Oktay& Marans, 2010). Accordingly, in such strong connection they are affected by facing positive and negative changes in the
neighborhood, so become suffering or inversely satisfying from life and neighborhood.

So, existence of abandoned and vacant houses in such compact and dense neighborhood directly decreases the community’s satisfaction values in physical, social and economical dimensions. It also deteriorates quality of urban life, increase lack of safety and health in the area. Therefore, Walled City of Famagusta is selected to determine the effects of abandoned/vacant houses on the satisfaction.

As it is clear from initial discussions, housing abandonment and neighborhood satisfaction are related concepts. These two concepts both have three dimensions: physical, social and economical. According to this three dimensional relation it can be said that overall neighborhood satisfaction in housing areas can be achieved through eliminating physical, social and economical causes of housing abandonment.

1.3 Aim and Objectives

The main purpose of this study is to analyze the effect of abandoned/vacant houses on neighborhood satisfaction in historic areas. Based on this aim, the main research question is developed as ‘What are the effects of housing abandonment on neighborhood satisfaction?’ Based on this main research question, the following sub-questions are developed:

- What are the causes of abandonment?
- What are the types of the abandonment?
- What are the indicators of neighborhood satisfaction?
• How much are residents satisfied by living next to the abandoned houses in the Walled City of Famagusta?
• What are the main factors that are increasing housing abandonment in the Walled City of Famagusta?
• Which strategies will help to decrease housing abandonment in the Walled City of Famagusta?

The objectives of this study are listed as follow:

• To define causes/impacts of housing abandonment;
• To understand the abandonment and its types;
• To determine indicators of the neighborhood satisfaction;
• To determine the relation between abandonment and neighborhood satisfaction;
• To explore the neighborhood satisfaction by living next to the abandoned and vacant houses;
• To define main factors that are increasing housing abandonment in the Walled City of Famagusta;
• To determine strategies to help to decrease housing abandonment in the Walled City of Famagusta;

1.4 Limitations

According to Municipality Revitalization Report that have been done in 2005, Walled City of Famagusta had divided into 9 districts. Districts 2, 3, and 4 are residential districts that selected for this study (Figure 1.1). This thesis focuses on housing abandonment; accordingly only residential districts are selected for the field study.
Figure 1.1: Residential districts in the Walled City of Famagusta

1.5 Methodology

Methodology of the thesis is organized in three parts (Table 1.1):

- **Theoretical review** and reviews on the sources, which are about the subject of the thesis: Historical environments, abandoned and vacant houses and neighborhood satisfaction.

- **Field study** is done in the three residential parts of the Walled City. It consists of observations and photographs. Physical analysis was done for collecting information about, vacancy rate, deteriorated structures and contaminated sites. The social analysis was used to find the neighborhood satisfaction about the
abandonment houses in these three districts.

- **Data analysis** field study, physical and socio-economic analysis data is analyzed.

This thesis is composed of five chapters. In the first part, the problems that are related with abandonment and neighborhood satisfaction, aim and objectives of the research as well as research questions are presented. Moreover, the research methodology and limitations are introduced. The second chapter defines the abandonment issue as well as its negative consequences and reasons. Chapter three explains the neighborhood satisfaction and its indicators. The fourth chapter includes case study. In this chapter physical analysis is done with the help of the city scale maps and colored in specific colors to emerge physical condition of residential districts. Social analysis is done through questionnaires. 64 questionnaires were filled to complete approximately 20% of the housing units. Questionnaires were asked from local residents of the selected housing districts. SPSS program is used for the evaluation of the questionnaires. Conclusions and recommendations are given in fifth chapter.
Table 1.1: Methodology of research

**INTRODUCTION**

- Definition of subject and research problem
- Definition of research aims and objectives
- Limitations

**THEORETICAL FRAMEWORK**

*Through literature review*

<table>
<thead>
<tr>
<th>Abandoned/vacant houses</th>
<th>Neighborhood satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types, reasons and consequences of housing abandonment</td>
<td>Physical and socio economic indicators of neighborhood satisfaction</td>
</tr>
</tbody>
</table>

**DATA COLLECTION**

<table>
<thead>
<tr>
<th>Physical analysis</th>
<th>Socio-economic analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fieldwork (façade condition, structure condition, vacant buildings analysis and etc.)</td>
<td>Questionnaire design (through questionnaires, 17 questions designed and 64 questionnaires were completed)</td>
</tr>
<tr>
<td>Observations</td>
<td>Documenting research</td>
</tr>
</tbody>
</table>

**DATA ANALYSIS**

<table>
<thead>
<tr>
<th>Physical analysis</th>
<th>Socio-economic analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of physical structure to identify abandonment and physical condition of districts for neighborhood satisfaction</td>
<td>Analysis of socio-economic structure for defining identify neighborhood satisfaction</td>
</tr>
</tbody>
</table>

**CONCLUSION and RECOMMENDATIONS**
Chapter 2

ABANDONED/VACANT HOUSES

2.1 Introduction

This chapter reviews housing abandonment, its types and basically focuses on the residential abandonment. Also, the negative consequences of residential abandonment in terms of physical, economic and social consequences are explained. Additionally the reasons of residential abandonment are put forward. Each factors, that causes residential abandonment such as lack of place attachment, crime, new houses in the market, aesthetic quality, locational obsolescence and contaminated sites are explained in detail.

2.2 Definition of Abandoned/Vacant Houses

Abandonment has been defined as *any unilateral transfer of ownership* where unilateral means the transferal of property or other assets (Strahilevitz, 2009). Abandonment refers to a house or group of houses that is empty. This can be caused by the occupier leaving without giving notice, or the owner deserting the property as it has not value or possibly even negative equity that they cannot see a resolution to (Power and Mumford, 1999). The decline begins with a general lack of maintenance followed by default on mortgage payments and other related liabilities. On a neighbourhood scale these negative impacts can lead to a decline in urban areas (White, 1986; James, 2001; Downs, 2010).
The rights and responsibilities implicit in property ownership are neglected, and this brings with it a number of impacts. Abandoned properties can become a focus of criminal activity such as drug related crime, which in turn can endanger public health, provide a safety risk to local children. This not only reduces the value of properties, but results in a deterioration of the quality of life enjoyed by local residents. In the event of a house becoming a nuisance, governments can take certain measures Mallach (2006).

According to Mallach, a house becomes a nuisance if:

- It is unfit for human habitation
- It could present a fire risk
- It becomes subject to illegal entry and/or the municipality has had to secure it because the owner has refused to do so.
- It is in such a poor state of repair and neglect that it affects the wider area, including causing a threat to the wellbeing of neighboring residents.

Evidence suggests that the issue of abandoned housing is also in part responsible for the break up of historical communities, which, once started, can lead to a progressive physical deterioration that in turn can fragment local socio-economic systems (Keenan, Lowe & Spencer, 1999).

It has been suggested by others (Kraut, 1999; Downs, 2010), that the downward spiral of neighborhoods can begin when the amount of abandoned houses reaches three to six percent. This seems a small number but is based upon figures produced by the United States Department of Housing and Urban Development (HUD) and compiled in 1973. Moreover it is suggested that regeneration projects that do not
address the issue of housing abandonment will not succeed, regardless of the level of resources.

Based on the above discussion and definitions of vacant and abandoned property it is concluded that this will have an impact on neighborhood satisfaction.

2.2.1 Residential Abandonment

The issues relating to abandonment and the types of buildings most likely to be abandoned will depend upon socio-economic conditions and accordingly will differ from city to city. Mallach (2006) identifies four types of abandonment:

- Residential abandonment
- Rental abandonment
- Commercial/retail abandonment
- Industrial abandonment

Based on the main aim of the thesis, residential abandonment will be explored in more depth. Figures 2.1 and 2.2 in below are some samples of housing abandonment in residential districts from Walled City of Famagusta and Istanbul.

Figure 2.1: An abandoned house in the Walled City of Famagusta, (Author, 2013)
According to Mallach (2006), the legal definition of residential abandonment has a number of strands, essentially that it has not been legally occupied for a minimum of 6 months, and that meets any one of the following criteria as determined by the responsible public officer:

- The building is in need of restoration but no such works have been carried out during that six month period.
- Building works commenced but ceased before completion and remained unfinished for a period of six months or more.
- Building tax payments are in arrears.
- The building has been deemed to be a nuisance.

Abandonment of housing is where public or private housing falls into disuse through being abandoned by their owners/occupiers, and where no effort is made to either restore the building or finance such a restoration. As such it is distinct from properties merely becoming vacant. Properties suffering from a lack of upkeep can
very quickly deteriorate to the extent that the investment required to achieve acceptable standards becomes prohibitive (Keenan, Lowe & Spencer, 1999).

Socio-economic factors are a key determinant in residential abandonment and it causes damage to neighborhoods. Amongst the problems identified are the wider health and safety impacts on those who remain in areas blighted by abandonment, in particular the threat of empty and sometimes derelict properties (Keenan, Lowe and Spencer, 1999). Although the impact of residential abandonment on urban societies is generally accepted, the causes are less understood.

“Sternlieb (1974) and his colleagues reported that residential abandonment is the final symbol of all the urban ills of a society, although it may have become urban common place it is little known or understood the very definition of abandonment is far from precise” (Sternlieb, Burchell, Hughes & James, 1974).

2.2.2 Three Aspects of Residential Abandonment

To leave a house is to neglect the duties of owners with regard to the minimum financial, physical and functional maintenance. The destruction of a residential building abandoned may lead to new investments, but is not a solution to solve it, the solution to get rid of this problem, even in the historical district; there are rules and restrictions for the application. In addition, the abandonment is often revocable because the owners can take their responsibility for maintenance, taxes and utilities. Housing abandonment can be considered under three main topics: financial, physical and functional (Hillier, Culhane, Smith and Tomlin, 2003):

- **Financial abandonment** is when owners do not maintain their financial responsibilities in relation to mortgage payments, rates, services bills and other
related taxes

- **Physical abandonment** is when owners neglect to maintain their properties to the extent that there may be health and safety implications such as roof deterioration, structural failure, broken windows and doors, which in turn could lead to the infestation of vermin.

- **Functional abandonment** is when the property is unoccupied and can no longer be used as a residence, even if all of the financial responsibilities are maintained. Doors and windows may be closed and/ or boarded up.

Figure 2.1 shows three aspects of abandonment that are interconnected and often occur simultaneously, but they are sufficiently distinct analytically to justify treating them distinctly.

![Figure 2.3: Abandonment has three distinct but related aspects (Hillier, Culhane, Smith & Tomlin, 2003).](image)

Figure 2.3: Abandonment has three distinct but related aspects (Hillier, Culhane, Smith & Tomlin, 2003).
2.3 Reasons of Abandonment

According to Mallach (2006) “Abandonment most often occurs when an owner concludes, rightly or wrongly, that the potential losses from continuing to occupy or maintain the property exceed the potential benefits”. The following section explores reasons for abandonment under the sub-headings of physical reasons and socio-economic reasons.

2.3.1 Physical Reasons

Difficulties with the physical upkeep and maintenance of buildings may eventually lead to physical abandonment. The reasons are related to aesthetic quality, locational obsolescence/ disorder and contamination.

2.3.1.1 Aesthetic Quality

Aesthetic quality is one of important factors of the physical abandonment reasons because buildings qualities are visually important for the residence as well as for new comers. Physical disorder, deteriorated structures, poor maintenance and undesirable affect are four reasons for the aesthetic quality which are mentioned in the following lines:

*Deteriorated structures*

Physical obsolescence refers to the deterioration of the structure, installations or finishing of buildings to the point of rendering them incompetent of accommodating the functions of the house (Figure 2.7). Deteriorated structures are the ones that have decay on their architectural elements and/or some missing parts on their facades (Oktay, 2005).
Figure 2.4: Deteriorated façade condition in the Walled City of Famagusta, (Author, 2013)

**Poor maintenance**

Usually the consequence of poor maintenance, physical obsolescence may also result from natural disasters or the sustained effects of weather or other damaging urban activities. Regardless of its origins, physical obsolescence makes buildings incapable of accommodating economic, cultural or residential activities that in turn leads to their abandonment. Historic buildings or sites are often among the most deteriorated structures in cities, making them extreme examples of physical obsolescence that can only be reversed with significant investments. Buildings need repair and maintenance beyond that offered by regular, ongoing maintenance. Without such refurbishment the physical condition of the building would deteriorate (Oktay, 2005).

**Physical disorder**

Dirty, rundown, disrepair buildings, graffiti, litter, broken doors and windows are all refers to physical disorder of the neighborhood. Because of these factors, residents may leave and move out from neighborhood (Ross & Mirowsky, 1999).
Undesirable affect

Homebuyers are acutely aware of the physical condition of a property and the quality of the surrounding environment. Personal perceptions in relation to size, required maintenance, and accessibility have a direct effect on the desirability and therefore the demand of a property (Brown, 1999).

2.3.1.2 Locational Obsolescence

A location can become obsolete when the uses of the buildings/land become obsolete. When the physical characteristics of a property relate to a use that is no longer economically viable economic obsolescence occurs (Doratli, 2000).

Location plays a major role in abandonment. Buildings can become obsolete, where they can no longer be productively used without substantial investment, which will exceed the value of the property, or where it is no longer desirable from a market perspective because of its layout. Obsolescence affects properties that no longer meet
current market trends such as small industrial buildings or small family houses (Mallach, 2006).

Market obsolescence, a decrease in housing demand and location are three aspects of locational obsolescence that will be explained in more detailed in below:

*Market obsolescence*

Market obsolescence occurs when the size or layout of the buildings is such that, depending on its location and physical condition, is no longer attractive to potential buyers or tenants to occupy (Mallach, 2006).

*Decreasing in housing demand*

Demand for housing in certain areas increases and decreases with time. As certain areas become more or less in demand as a place to live, people will move in or out of communities, possibly leaving a house vacant as they create a new home in a different neighborhood (Brown, 1999).

*Quality of location*

The market makes decisions based not only on quality and location, but also on environmental and government services offered which might have little to do with the property as such (Bier, 2001). As mentioned previously, the property literature highlights the importance of the quality of environmental amenities, population and density, demographic make up in the neighborhood, quality of schools, degree of public sector services and public safety. Often the suburban neighborhoods offer greater choice and quality in these factors apart from the relative better quality of the dwelling itself (Mhatre, 2007).
2.3.1.3 Contaminated Sites

Contaminated land is land that contains toxic substances in or under the ground that are actually or potentially hazardous to health or the environment. Areas with a long history of industrial production will have many sites that may be affected by their former uses such as gasworks, mining, industry, chemical and oil spills, waste disposal etc. These sites are known as Brownfield Land. In this study, contaminated sites are the ones that have garbage and the buildings that are used for incompatible use in the neighborhood.

Hazardous to health and environment

Contaminated sites are those contaminated by hazardous materials that may pose a threat to human health or the environment. Contamination can occur as a result of poor environmental management and waste disposal practices or through accidental spills of toxic materials. Particular uses throughout history, not known to cause problems at the time, sometimes leave areas of contaminated land that will need to be cleaned up before the site is redeveloped (Bullard, 2000).

Lack of environmental standards

Lack of awareness of environmental standards prior to more recent legislation has adversely impacted upon the quality of the contaminated sites and the wider area through the effects on health, property prices, in addition to the social effects of property dereliction and adjacent abandonment (Bullard, 2000).

2.3.2 Socio-economic Reasons

Changes of use and redevelopment in historic areas may lead to irretrievable loss of heritage sites and to reduced housing options for the urban poor. In the more disadvantaged historic areas, historic structures are often allowed to decay through a
lack of maintenance and overall neglect (Oktay, 2005). The problem of housing abandonment reflects the decline of the private housing market in historic neighborhoods, caused by a complex range of social and economic factors (Ced, 1978).

Vacant and abandoned buildings are often considered to be a cause of neighborhood physical and social disorder. Neighborhood disorder is related to problems of deviance, noise nuisance, vandalism, drug use, trouble with neighbors, and other incivilities relating to a general breakdown of social control. Even if residents are not directly victimized, people see the potential for disorder each time they see a group of teenage boys in the street, a boarded-up building or vacant site (Skogan, 1986).

Economic success allows people to change their residential location; areas are often seen as favorable to families because of higher quality schools and social & environmental services. This movement of households towards outlying areas has led to abandonment of properties in historic neighborhoods. Residents that can afford to do so relocate and leave behind residents who are unable to afford to move. This can lead to neighborhoods where people are moving out without being replaced leading to large amount of vacant buildings (Mhatre, 2007).

Place attachment, crime and new houses in housing market are indicators of socio-economic change and are discussed in detail below:

2.3.2.1 Place Attachment

“Place attachment can be considered as the bonding of people to places” (Low and Altman, 1992), where bonding can be seen in two ways: functional (or practical) and emotional. This division is described as the distinction between behavior and bond or
as comprising two dimensions, place dependency and place identity (Williams et al., 1992; Jorgensen and Stedman, 2001).

A relationship between the two has been described as follows: “Attachment to a place is a set of feelings about a geographic location that emotionally binds a person to that place a function of its role as a setting for experience” (Rubinstein and Parmlee, 1992). We tend to become emotionally attached to places when they support our self-identity. Places do this if they are distinct from other places; if they offer similar experiences over time; and if they allow us to have confidence in ourselves (Manazo & Perkins, 2006).

The characteristics such as age and length of stay, home ownership, level of income and level of education in a neighborhood have the great impacts on place attachment that are put forward in the following section:

**Age and length of stay**

The distribution of age in neighborhoods is dependent upon education and job opportunities, transportation and mobility. Younger families are leaving their neighborhood for more active and ambitions areas. Middle aged, elderly and retired families are likely to stay in the original neighborhood. These people have significantly higher levels of attachment to the neighborhood and but after their death their children may think differently and decide to sell or rent to people who do not have such a degree of attachment as the original owners (Rowntree, 2008).

**Level of income**

High-income households can leave the historic city, while those with lower incomes
remain, as they have no other option. Residents that are young, professional, technical, and managerial workers with higher education and income levels replace the older residents who are lower income, working-class and poor, minority and ethnic group members (Marcuse, 1985).

*Level of education*

Higher education was associated with higher levels of place attachment; differences in income between different neighborhoods and the issue of racial composition proved not to be significant indicators of degrees of attachment (Woolever, 1992).

*Homeownership*

Home ownership offers a higher social status in addition to giving independence from landlords. The higher standing in the community that comes from being a homeowner is likely to enhance the sense of belonging and improve bonding.

Place attachment, place identity, and sense of community can be seen as resources for neighborhoods that need to be cultivated in order to withstand the social and economic forces that leads to displacement through property abandonment.

**2.3.2.2 Crime**

Declining neighborhoods are often characterized by high crime rates. For generations, the principal explanation has been that poverty is to blame. The people who contribute to binding the community together often move out when they can; and those left behind feel incapable of carrying on this role. The perceived reduction in social cohesion signals to potential offenders that the neighborhood is vulnerable (Spelman, 1993). Lack of social control and health and safety hazards are two components of crime that are presented in the following sections:
Lack of social control

Social problems refer to visible clues that indicate a lack of order and social control in the community. Order refers to a state of peace, safety, and legal conformity, and control is the maintenance of this order. Indicators of a lack of order and control are easily visible and take the form of fighting and trouble amongst neighbors, and the presence of people hanging around in streets drinking and taking drugs and generally creating a threatening presence and sense of danger (Skogan, 1990).

Health and safety hazards

“The health and safety hazards, as well as the prospect of further decline, seriously impair the marketability of neighboring properties. Frequently, these buildings cannot be sold at any price. An owner seeking to escape from the neighborhood may be forced to abandon his own property and any equity he may have in it, causing more abandonment and adding to the general deterioration of the community” (James, 1975).

2.3.2.3 New Houses in Housing Market

Property developers invest in areas based on their perception of the needs and wishes of the marketplace. They need to persuade people to relocate from their existing properties to new developments. Investors also are responding to pressures independent from consumer desires such as interest rates, tax advantages and alternative opportunities in commercial sectors. New houses can be seen as a flow independent of the state of any particular “housing market” in one area (White, 1971).

The strength of this approach is that it denaturalizes market forces and demographic change that are usually cited as the main cause of abandonment. Neighborhood
decline, in this view, is not a failure of the market, but of the institutions that govern it (Shlay & Whitman, 2006), and this failure is actively (and sometimes intentionally) created by certain stakeholders in the course of profit seeking speculation. The banks that avoid certain neighborhoods, the estate agents and developers who invest in the suburbs rather than the inner city, and the landlords who decided to profiteer from their properties rather than maintain them should be taken seriously for the power they command in the initiation or fragmentation of neighborhood decline (Aalbers, 2006).

Some households, even if they would prefer to remain in their neighborhoods, are unable to do so because of poor quality housing or social services, and are forced to move to outer areas affording a higher quality environment. This results in the filtering down of historic neighborhood properties instead of suburban lands that are continuing to rise in value thus making them also a worthwhile real estate investment as opposed to historic neighborhood properties that are declining in value due to decreased demand. Table 2.1 shows list of physical reasons for housing abandonment in brief.
Table 2.1: Reasons of housing abandonment.

<table>
<thead>
<tr>
<th>Physical Reasons</th>
<th>Socio-economic Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aesthetic quality</strong></td>
<td><strong>Place attachment</strong></td>
</tr>
<tr>
<td>• Deteriorated structures</td>
<td>• Age and length of stay</td>
</tr>
<tr>
<td>• Poor maintenance</td>
<td>• Level of income</td>
</tr>
<tr>
<td>• Physical disorder</td>
<td>• Level of education</td>
</tr>
<tr>
<td>• Undesirable affects</td>
<td>• Homeownership</td>
</tr>
<tr>
<td><strong>Locational obsolescence</strong></td>
<td><strong>Crime</strong></td>
</tr>
<tr>
<td>• Market obsolescence</td>
<td>• Lack of social control</td>
</tr>
<tr>
<td>• Decreasing in housing demand</td>
<td>• Health and safety hazards</td>
</tr>
<tr>
<td>• Quality of location</td>
<td><strong>New houses in housing market</strong></td>
</tr>
<tr>
<td><strong>Contaminated sites</strong></td>
<td></td>
</tr>
<tr>
<td>• Hazardous to health and environment</td>
<td></td>
</tr>
<tr>
<td>• Lack of environmental standards</td>
<td></td>
</tr>
</tbody>
</table>

2.4 Negative Consequences of Residential Abandonment

The visual appearance of buildings and neighborhoods say much about the community living there, its priorities, and its physical, social and financial health. Properties that are left to decay are symptomatic of a lack of willingness or an inability to invest in the neighborhood and generally reflect a decrease in market demand (Mhatre, 2007). These impacts will be discussed under three sub-headings; physical consequences, economic consequences, and social consequences:

2.4.1 Physical Consequences

Properties that are dilapidated for a prolonged period are seen as a symbol of neglect to those within the community as well as to those passing through. The negative aesthetic impact and negative social impact are outlined below:

Negative aesthetic contribution

Abandoned and neglected buildings have a depressing impact on neighborhoods, and bring no aesthetic pleasure to residents and visitors (Setterfield, 1997). A lack of
maintenance of both buildings and grounds is one of the main factors in the decline of neighborhoods.

![Figure 2.6: An abandoned house and negative aesthetic contribution in the Walled City of Famagusta](image.png)

Negative affects on housing quality

As mentioned above housing quality affects perceptions of neighborhood quality as abandoned housing units often leads to a cycle of decline which in turn can lead to a downward spiral where families leave the area when their financial situation allows, rather than re-investing in their original neighborhood. The impact of this outward migration leads to local businesses also relocating resulting in a progressive decline (Ott, 2009).

2.4.2 Social Consequences

The social consequences of abandonment can take various forms. The lack of maintenance of properties and their grounds can lead to a build up of refuse, create a habitat for rats and other stray animals and encourage squatters, homeless people and criminals to move in leading to the threat of the trade and use of illegal drugs. In addition the refuse leads to increased fire risks, which can also threaten adjoining properties, and general security in the neighborhood.
Trash and garbage accumulate

Trash and garbage accumulate in and around vacant buildings, provide a convenient breeding ground for rats and other disease carriers. The buildings function as hazardous play areas for unsuspecting neighborhood residents (Figure 2.5). There is an extremely high incidence of fire with its attendant threat to neighboring properties in abandoned buildings because of their special vulnerability to arsonists and careless vagrants. Empty buildings frequently harbor criminal activities, as well as criminals themselves. The fundamental desire of the neighborhood residents to attain a reasonable degree of security in their residential environment is frustrated by activities, which abandoned structures help to proliferate (James, 1975).

Health problems

Buildings that have been abandoned often end up as rubbish dumps, creating favourable conditions for rat infestation and the public health risks that ensue. The other risk is that of toxic waste (Figure 2.6), especially in the case of the
abandonment of industrial buildings but abandoned residential properties also contain toxic waste such as paints, batteries and cleaning materials (Setterfield, 1997).

Figure 2.8: Waste materials and trash in an abandoned house in the Walled City of Famagusta, (Author, 2013)

_Criminal activities_

It’s a well known fact that ‘eyes on the street’ can help to alleviate crime whereas empty public places with little or no surveillance can have the opposite effect. Vacant and abandoned buildings not only become sites for criminal activity but prevent this public surveillance.

_Depression_

In addition to the negative impacts of abandonment on local communities mentioned above, these declining neighborhoods with their boarded up windows and poor quality public infrastructures cause increased levels of depression amongst the local community. It leads to social isolation as people prefer to stay indoors, thus reducing the amount of law abiding citizens on the street (Kraut, 1999). It is more beneficial from a surveillance perspective if people are moving around their neighborhood.
Local residents who consider it unsafe to go out can suffer from poor physical health in addition to depressive illnesses (Downs, 2011).

2.4.3 Economic Consequences

The reduction of house prices together with related economic losses affects not only abandoned properties but also has a knock-on effect on neighboring houses and local businesses and lowers their value too (Setterfield, 1997). These market value reductions and their consequences are discussed below:

*Lowering the market value*

As stated above, one of the main impacts of abandoned buildings is the reduction in the market value of the surrounding buildings. This reduction in public sector revenue can result in an increase in property taxes, which in turn can lead to further abandonment. If the public sector is unable to maintain this revenue through property taxes, then essential services and public infrastructures will suffer (Accordino & Johnson, 2000).

Those living in these declining neighborhoods who are in the middle or upper income brackets and are in a position to re-locate to better neighborhoods do so and are replaced with those who were living in more desirable neighborhoods but whose financial circumstances have changed. This results in a financial and social polarization that can destabilize communities (Brown, 1999).

In spite of this polarization and downward spiral, many still either hold onto their property or even buy in such areas as an investment commodity in the hope that values will rise in the future, perhaps through public infrastructural changes such as urban renewal initiatives in the area. There is an important distinction to be made
between the value of the buildings and the value of the land that they sit on. Public sector urban renewal projects may result in an increase in land values but unkept and uninhabited properties will decrease the value of the building.

Disinvestment in the neighborhood

As already stated vacant buildings generally reduce the value of neighboring properties and this usually results in a lack of investment in the area, and a reduction in the public sectors tax revenue. In addition to this additional public costs are incurred through associated crime and the costs of securing buildings and grounds. Although owners can be pursued through the courts for costs incurred relating to their properties, in reality this is rarely successful. The reductions in tax revenue and population results in a reduction of public services in the area including emergency services.

The encouragement of other vacancies

Abandonment is an ongoing process whereby the abandonment of properties creates the conditions that result in further abandonment, causing a downward spiral of socio-economic decline (Setterfield, 1997). This has been referred to as the ‘Broken Window Theory:

“...The Broken Window theory points that one broken window, if left in disrepair, will actually lead people to break more windows. The underlying assumption of such

\[\text{“The broken windows theory was first introduced by social scientists James Q. Wilson and George L. Kelling, in an article titled Broken Windows and which appeared in the March 1982 edition of The Atlantic Monthly. The title comes from the following example:”}

“Consider a building with a few broken windows. If the windows are not repaired, the tendency is for vandals to break a few more windows. Eventually, they may even break into the building, and if it’s unoccupied, perhaps become squatters or light fires inside. Or consider a sidewalk. Some litter accumulates. Soon, more litter accumulates. Eventually, people even start leaving bags of trash from take-out restaurants there or even break into cars”
behavior is that where no one is tending the property, breaking more windows poses little risk. Applying this theory to a larger scale, other sociologists contend that a physical breakdown in a neighborhood's appearance, typically signaled by a vacant or abandoned building, can indicate to both community residents and outsiders that no one is in control or concerned about enforcing the neighborhood's rules of order and thus gives free license to those engaged in destructive behavior (Kraut, 1999).

The broken window effect can extend to whole neighborhoods where abandoned properties lead to other abandoned properties and this can begin in one neighborhood but can also spread to other better neighborhoods (James 1975). This has the effect of lowering confidence and leads to others leaving their neighborhoods (Downs, 2010). Table 2.2 presents the list of negative consequences of housing abandonment and their indicators:

Table 2.2: Negative consequences of abandoned houses

<table>
<thead>
<tr>
<th>Physical consequences</th>
<th>Social consequences</th>
<th>Economic consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Negative aesthetic contribution</td>
<td>• Health problems</td>
<td>• Lowering the market value</td>
</tr>
<tr>
<td>• Negative affects of housing quality</td>
<td>• Criminal activities</td>
<td>• Disinvestment in the neighborhood</td>
</tr>
<tr>
<td></td>
<td>• Depression</td>
<td>• The encouragement of other vacancies</td>
</tr>
</tbody>
</table>

2.5 Summary of the Chapter

Abandoned houses have been a problem for urban areas for years and this has been exacerbated up to 2010 due to reducing urban populations and problems in the housing market. A review of the literature revealed that the issue of abandoned buildings could be linked to a wide variety of social, economic and physical
problems. They also erode the aesthetic appeal of whole neighborhoods. Vacant and abandoned buildings can cause land contamination and physical decay.

Finally, abandoned buildings have a tendency to accumulate in certain neighborhoods that is partly a symptom of the tendency of abandonment to encourage further abandonment in a declining spiral of urban blight and decline.

The following chapter examines neighborhood satisfaction. Since abandonment affects the physical, economic and social environments, this study looks at the perceived physical, economic and social characteristics satisfaction.

Chapter 3
NEIGHBORHOOD SATISFACTION

3.1 Introduction

This chapter reviews neighborhood satisfaction and its main indicators such as social, physical and economical and their sub-titles as social ties with neighbors, crime and safety, length of stay, homeownership, physical decay, aesthetic and housing quality.

3.2 Neighborhood

The literature on neighborhoods defines neighborhood in many ways. Brower (1996) explains that its form derives from a particular pattern of activities, the presence of certain visual characteristics, an area with particular boundaries or a network of streets. Definitions vary depending on the purpose, so that the neighborhood may be seen as a source of place-identity, an element of urban form, or a unit of decision-making. It would appear that research uses multiple definitions of a neighborhood and this itself suggests that neighborhood is not a static concept but rather a dynamic one (Talen & Shah, 2007; Hur, 2008).

Neighborhoods are studied because they are where people spend the majority of their lives. An extensive literature review reveals that neighborhoods can affect the educational, economic, and social outcomes of residents (Skogan, 1990; Blank, 1997; Jargowsky, 1996). Where a person lives usually determines what schools they will attend, what career opportunities they will have, what kind of friends they
develop. As a result, neighborhoods can determine educational attainment, future income levels, teenage pregnancies, and criminal activity (Skogan, 1990; Blank, 1997; Jargowsky, 1996). The assessment of neighborhood quality should therefore be a priority for policy makers who wish to improve on these outcomes for residents.

A historic urban neighborhood forms part of our overall environment and provides evidence of past human activity within a specific part of an historic city. They generally have mixed uses, traditional and unique visual characteristics and a specific range of functions, a historic identity and fabric and a specific street pattern. They are the centers of the social, economic and cultural life of the towns (Tiesdell et al., 1996). Historic buildings with unique street patterns and urban grain, pedestrian friendly streets and vibrant public spaces, which have a mixed function, are the elements of historic neighborhoods.

Oktay & Marans (2010) reported that there is often a need to assess how satisfied residents are with their local environment. Residential satisfaction indicates people’s response to the environment in which they live. In this context, the term environment refers not only to physical aspects of residential areas, such as dwellings, dwelling environments, and neighborhoods, but also to social, economic and even organizational aspects.

Abandonment and its negative impacts upon the surrounding neighborhood continue to grow. Neighboring housing owners who choose to remain in and attempt to revitalize such unstable neighborhoods are confronted with the health and safety hazards posed by adjacent empty buildings and suffer the consequences of general neighborhood deterioration. The response of the residents to the situation is usually
3.2.1 Neighborhood Satisfaction

Modern cities offer a number of ways to connect with others and build community; in particular, neighborhoods remain the place where residents build attachments to people and place that gives a sense of quality of life. Strong neighborhoods provide the environment for friendships, social capital, encourage community engagement, and provide access to resources that contribute to resident satisfaction and quality of life generally. Happy residents within neighborhoods have higher overall life satisfaction, mental health, and well-being. Low neighborhood satisfaction however is implicated in residents’ wish to move, which can interrupt neighborhood stability and cohesion (Bolan, 1997; Oh, 2003; Dassopoulos, Batson, Futrell & Brents 2012).

The neighborhood, can be a focus for social and financial investments, and provides potential sources of friends for people (Feld, 1981). Although people often find their community elsewhere rather than their own neighborhood, the importance of the residential environment remains a fundamental basis of life. People live in the environment, experience it on a daily basis, and share their sense of communities with their neighbors. Residential and neighborhood satisfaction is a critical factor in their intention to move. High satisfaction among residents within a neighborhood encourages people to remain, attracts others to move in, and affects people’s quality of life and their health (Hur, 2008).

Attachment to community begins with community satisfaction. People are unlikely to form attachments to places that they do not like. Social ecologists have found that communities have a significant influence on resident satisfaction. Smaller rural communities tend to have higher levels of satisfaction than larger urban
communities. Surprisingly this seems to be the case irrespective of socio-economic factors, which suggests that spatial-social contexts have a direct impact on sentiment (Marans & Rodgers, 1975; Rodgers, 1980). Fried (1982) asserts that other factors such as housing quality, neighborhood quality, ease of access to nature, and home ownership all affect community satisfaction. Guest and Lee (1983) support this evidence claiming that home ownership, larger houses, access to local parks, and designs incorporating cul-de-sacs generate higher levels of satisfaction (Rennick, 2003).

Other studies have examined the effect of the perception of the environment on levels of satisfaction. A study conducted by La Gory, Ward, and Sherman (1985) for example analyzed neighborhood satisfaction of elderly metropolitan residents and found that satisfaction with objective qualities of the neighborhood, such as income level and amount of vacant housing, produced more consistent levels of satisfaction among residents. However, personal perceptions of neighborhood, such as levels of maintenance and relationships with neighbors, register more variation of satisfaction.

A second and important study performed by Herting and Guest (1985) also examined objective and perceptual factors and their effect on levels of satisfaction and came up with similar findings. Therefore a wide range of ecological, social, environmental, and perceptual factors influence local sensitivity. According to Hummon (1992), the size and type of community, and the quality and degree of ownership of housing, together with the quality of the physical neighborhood are particularly important in developing a sense of satisfaction. In addition, the social level of within the community and their perceptions also influence levels of satisfaction (Hummon, 1992).
The physical deterioration of the human built environment has been proven to be an important influence on health. Since the 1920s, the “Chicago School” in Sociology brought attention to the impact of neighborhood physical decay on mental health problems (Augustin, Glass, James, & Schwartz, 2008). Austin, Furr, and Spine (2002) found that the quality of housing affects satisfaction with the local physical environment, which impacts on perceptions of neighborhood safety. This finding is consistent with "Disorder theory" that is mentioned in Chapter 2, which proposes that physical disorder is a signal of the lack of safety and social cohesion of a neighborhood (Kruger, Munsell & Turner, 2011).

Physical deterioration, social disorganization, and high crime rates are generally considered to be symptomatic of low sense of neighborhood community. Neighborhoods with high structural deterioration attract criminal behavior because such disorder suggests that the perpetrators of such behavior are less likely to get caught. Residents experience a lower degree of neighborhood safety and social capital and have a greater expectation of crime in areas with greater concentrations of deteriorated structures. Non-residents also perceive a lower quality of environment and exhibit less trust of local youths in areas with greater physical disorder (Kruger, Reischl, & Gee, 2007).

### 3.3 Neighborhood Satisfaction Indicators

Neighborhood satisfaction reflects residents’ perception about how well a neighborhood meets their physical, social and economic needs (Galster and Hesser 1981; Amerigo and Aragones 1997; Lu 1999). Dassopoulos and Monnat (2011) suggest that resident satisfaction is highest in neighborhoods that fulfill a social need
for neighborly interaction, trust, and community cohesion, but material needs of appropriate housing and a high degrees of safety have an even bigger impact.

Physical deterioration and urban decay have negative effects on neighborhood satisfaction and quality of life. Home repossessions, unemployment, and reductions in population threaten quality of life in neighborhood. Some studies noted that physical disorder; abandoned properties, vacant sites, and perceptions of crime are among the strongest indicators of one’s sense of satisfaction with place (Woldoff 2002; Ross and Mirowsky 1999; Skogan 1990). Also social relationships with neighbors have a strong impact on individuals’ satisfaction with their neighborhoods (Parkes, Kearns, and Atkinson 2002; Lee, Campbell, and Miller 1991).

Based on the literature review, physical appearance, level of ownership, level of income and contact with neighbors are all important factors affecting residential satisfaction in particular and neighborhood satisfaction in general (Potter & Cantarero, 2006).

There are three main dimensions of neighborhood satisfaction. These are physical, social and economic. In the following part, these dimensions are presented in detail.

3.3.1 Physical Satisfaction

Studies have suggested that physical disorder (incivilities) affects neighborhood satisfaction. It promotes fear of crime, makes people want to leave the area, and diminishes residents’ overall neighborhood satisfaction (Accordino & Johnson, 2000; Alvi et al., 2001; B. Brown et al., 2004; Kelling & Coles, 1996; LaGrange, Ferraro & Supancic, 1992; Perkins et al., 1990, 1992, 1993; Sampson & Raudenbush, 1999; Skogan, 1990; Spelman, 2004; Wilson & Kelling, 1982). Physical incivilities can be
grouped into three kinds: the fixed feature elements such as a vacant house and
dilapidated building (Accordino & Johnson, 2000; B. Brown et al., 2004; LaGrange,
Ferraro, & Supancic, 1992; Perkins et al., 1990, 1992, 1993; Spelman, 2004), the
semi-fixed feature elements such as, graffiti and broken feature on buildings (B.
Brown et al., 2004; Kelling & Coles, 1996; LaGrange, Ferraro, & Supancic, 1992;
Perkins et al., 1990, 1992, 1993; Wilson & Kelling, 1982), and non-fixed (movable)
elements such as, litter and abandoned cars. In the following sections, physical
satisfaction indicators will be discussed.

3.3.1.1 Physical Decay

Physical decay and an unsafe environment are obvious causes of low neighborhood
quality ratings. Abandoned houses, factories and businesses, occupied buildings in
poor or dangerous condition; streets with decaying sidewalks, deteriorating structures
and litter, all are symbols of neighborhood decay. Sanoff (1975) argues that decaying
neighborhoods send a psychological message of death to residents.

3.3.1.2 Aesthetic Quality

Studies repeatedly conclude that aesthetic quality is one of the most important factors
in neighborhood satisfaction (Carvalho et al., 1997; Francescato et al., 1979; Gruber
Langdon, 1988, 1997; Parkes et al., 2002; Sirgy & Cornwell, 2002).

In relation to aesthetic quality, Nasar’s (1988) survey of residents and visitors found
that their visual preferences identified five likable features: naturalness, good quality
maintenance and upkeep, openness, historic significance, and order. People liked the
visual quality of areas that had those attributes and they disliked the visual quality
and undesirable effects of areas that did not have them. Other research has also found
these attributes related to aesthetic appraisals (Carvalho et al., 1997; Jorgensen,

Studies repeatedly confirm that regular maintenance affects neighborhood satisfaction (Carvalho et al., 1997; Hummon, 1992; Lansing & Marans, 1969; Lansing et al., 1970; Marans & Rodgers, 1975; Miller et al., 1980; Newman & Duncan, 1979; St. John & Clark, 1984; Zehner, 1971). These findings show stability across racial boundaries (St. John & Clark, 1984) and scale of the environment (Marans & Rodgers, 1975; Miller et al., 1980). Perceived levels of maintenance also relates to perceived safety/fear of crime and a general sense of community, which may also relate to neighborhood satisfaction (Alvi et al., 2001; Cook, 1988; McCrea, Stimson, & Western, 2005; Miller et al., 1980; Taylor et al., 1985).

### 3.3.1.3 Housing Quality

As aforementioned in chapter 2, housing quality and location affects perceptions of neighborhood quality because blighted or vacant housing units can initiate a downward cycle of decline within communities. If housing quality is low, or deteriorates, families may leave when their economic situations improve rather than reinvesting in their current housing and neighborhoods. Such outward migration can cause commercial and business activity to flee from deteriorating neighborhoods (Mallach, 2005, 2008). Older historical neighborhoods, experiencing low or no economic growth and population loss, are acutely affected by this phenomenon (Judd, 2008; Fox, 2005).
3.3.2 Economic Satisfaction

As suggested by a variety of different studies, satisfaction with the physical and social features of the neighborhood plays a significant role in determining neighborhood satisfaction. Also satisfaction with the economic aspects of a neighborhood may play a significant role in determining neighborhood satisfaction. Examples of these economic aspects include the value of properties in the neighborhood and levels of income (Sirgy & Cornwell, 2002).

3.3.2.1 Level of Income

Housing prices do not necessarily reflect quality. They relate to many factors, including availability of jobs and proximity to commercial establishments, access to amenities, taxes and public services, and the level of income of neighborhood residents. There are, for example, many lower income areas with relatively low housing values that have a number of particular qualities. Households with higher levels of income and wealth achieve more desirable neighborhoods, whereas those with lower incomes may feel trapped in less desirable neighborhoods (Kasinitz & Rosenberg, 1996).

3.3.2.2 Home Value

People will always move in and out of particular areas and the stability of the area is dependent upon the new residents being similar to the old ones, and are therefore likely to maintain the standards established by the previous owner. If low-income families suddenly move in and the housing begins to deteriorate, the current residents will either move out or try to avoid these changes from happening.

Many families have made considerable investments in their homes, but if they do not think that the neighborhood will prosper; they may not maintain this investment in housing upkeep. If residents think that neighborhood and home values will
deteriorate, they may move. These concerns may spread to other residents, and without strong neighborhood organization or other incentives to remain, areas can rapidly deteriorate, with changes in the social makeup of households to poorer and less stable families (Mcgah, 1986).

3.3.3 Social Satisfaction

There were a number of studies that indicated the importance of social characteristics on neighborhood satisfaction. Safety, longer tenure in the neighborhood, and homeownership of residents are some of social indicators for neighborhood satisfaction presented in the following sections:

3.3.3.1 Social Ties With Neighbors

Social relationships within neighborhoods have a strong relationship to satisfaction within the neighborhood (Sampson 1988, 1991; Adams 1992; Lee, Campbell, and Miller 1991; Parkes, Kearns, and Atkinson 2002). Research demonstrates that people create communities within their neighborhoods through the development of social interaction or “neighboring” (Kasarda and Janowitz 1974; Skjaeveland, Garling, and Maeland 1996; Woldoff 2002). According to Woldoff (2002), neighboring activities such as talking with neighbors, sharing things, doing favours for each other, and getting together to solve neighborhood problems. This way residents develop a shared sense of community by establishing formal and informal social ties and local organisations. (Kasarda and Janowitz 1974; Berry and Kasarda 1977; Hummon 1992).

In neighborhoods with strong communities, residents provide support to each another on the basis of community ties and not necessarily on a tit for tat basis. Neighbors support each other because they are neighbors, and not because they expect something in exchange. In closely knit neighborhoods, this mutual support exists
between residents even where they do not particularly like each other (Wellman & Wortley, 1990). This kind of collective action in neighborhoods has had a positive influence on neighborhood satisfaction (Taylor, 1996). As stated in Chapter 2, abandoned and vacant houses in neighborhoods have negative affects on social cohesion and neighborhood ties between neighbors, in other words residents have less neighbors to communicate with and share their daily social life and this causes dissatisfaction among existing residents.

3.3.3.2 Crime and Safety

The conditions of urban neighborhoods have been shown to have a strong impact on how safe residents feel and their fear of crime. Areas containing buildings in a bad state of repair and high levels of litter give the impression of a breakdown of social order. Several studies have been carried out that such conditions may lead to a fear of crime, and higher degrees of risk (Skogan and Maxfield 1981; Rountree and Land 1996). Based on research carried out by Baba and Austin (1989), on the experiences of victims of crime, higher levels of satisfaction with the local environment lead to higher levels of perceived safety (Baba & Austin, 1989) and that there is a close relationship between quality of life and fear and neighborhood satisfaction (Marshall, 1991). The incidence of localized petty crime and other significant social changes in neighborhoods suggest that the level of social control in the area is deteriorating (Greenburg & Rohe 1986).

The social demographics of neighborhoods also are known to affect perceptions of safety. Neighborhoods with people from diverse backgrounds lead to feelings of being unsafe. (Rountree & Land, 1996). Residents of neighborhoods that have changed in terms of age and racial background of residents are likely to express higher levels of fear than those from areas with less change (Taylor & Covington,
Lane and Meeker (2000) argue that people are concerned about the fear of crime particularly where there is increasing homogeneity within the neighborhood. Even though this fear may not be associated with racial prejudice (Skogan, 1995). The instability of neighborhoods partially explains the difference between perceptions of risk and the reality of victimization (Myers& Chung 1998) and how residents respond to disorder (Taylor, 1996).

### 3.3.3.3 Length of Stay

How long people have lived in their property affect the level of engagement with local communities and neighborhoods as well: Longer periods of residence increases social ties and results in higher levels of commitment to the area (Berry& Kasarda 1977; Hunter 1974). Integration into local neighborhoods decreases contact with strangers and increases familiarity with others living in the neighborhood (Hunter and Baumer 1982).

Older people who are long-term residents of their homes had high neighborhood quality ratings and home satisfaction, while younger and shorter-term residents are much less satisfied with their homes and neighborhoods.

### 3.3.3.4 Homeownership

There is a direct relationship between homeownership and levels of neighborhood satisfaction. Morris et al (1976) suggested that tenure might affect levels of satisfaction amongst residents, and found that those renting are more likely to move than owners are. Lee and Guest (1983) concluded that homeowners are are happier with their neighborhoods because their financial means lead them to seek out better neighborhoods and care for them more. Homeowners are also known to be more involved in their neighborhoods as they have a vested interest (Morris et al, 1976). Neighborhood satisfaction indicators and their features has collated in Table 3.1.
Table 3.1: Neighborhood Satisfaction Indicators:

<table>
<thead>
<tr>
<th>Physical Satisfaction</th>
<th>Social Satisfaction</th>
<th>Economic Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical decay</td>
<td>Social ties with neighbors</td>
<td>Income</td>
</tr>
<tr>
<td>• Poor maintenance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aesthetic quality</td>
<td>Crime and safety</td>
<td>Home value</td>
</tr>
<tr>
<td>• Poor maintenance and upkeep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Physical undesirable effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing quality</td>
<td>Length of stay</td>
<td></td>
</tr>
<tr>
<td>• Quality of location</td>
<td>Home ownership</td>
<td></td>
</tr>
</tbody>
</table>

3.4 Summary of the Chapter

As discussed in chapter 2, housing abandonment is a product of physical and socio-economic problems in neighborhoods, which results in a downward spiral of decline. As can be followed from literature reviews, in order to determine the housing abandonment in a neighborhood, it is necessary to check three dimensions-physical, economic and social reasons in such neighborhoods. As also discussed in chapter 3, neighborhood satisfaction is strongly associated with neighborhood stability, an important factor for the health and sustainability of communities and cities. Neighborhood satisfaction is also divided into three sub-systems such as, physical, economic and social satisfactions. In other words, physically, socially and economically healthy neighborhoods are accepted as successful in terms of satisfaction.
As it is clear from the figure 3.1, the three dimension of each concept (housing abandonment and neighborhood satisfaction) are not separable from each other. In other words, any problems in physical dimension of housing abandonment are affecting economy and social dimension as well. It is also same for neighborhood satisfaction (Table 3.2).

In line with the discussion both in chapter two and three, it can be said that neighbourhood satisfaction is negatively affected by existence of abandoned houses. Accordingly, we may argue that in order to achieve neighborhood satisfaction at all three levels physical, social and economic housing abandonment should also be low in a neighborhood.
Table 3.2: Relationship between the reasons of the housing abandonment and the indicators of the neighborhood satisfaction:

<table>
<thead>
<tr>
<th>Neighborhood Satisfaction in Historic Urban Quarters (A)</th>
<th>Relies on (B) Reasons of Housing Abandonment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Satisfaction</td>
<td>Physical Reasons</td>
</tr>
<tr>
<td>Economic Satisfaction</td>
<td>Economic Reasons</td>
</tr>
<tr>
<td>Social Satisfaction</td>
<td>Social Reasons</td>
</tr>
</tbody>
</table>

According to the relationship between two concepts, the reasons of the housing abandonment and the indicators of the neighborhood satisfaction are matched in order to find out the effects of the housing abandonment on neighborhood satisfaction (see Table 3.3)

Table 3.3: Relationship between housing abandonment and neighborhood satisfaction

<table>
<thead>
<tr>
<th>Physical Reasons for Abandonment + Physical Satisfaction</th>
<th>Socio-Economic Reasons for Abandonment + Socio-economic Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lack of Aesthetic and housing quality of houses and physical decay</strong></td>
<td><strong>Low level of Place attachment</strong></td>
</tr>
<tr>
<td>• Deteriorated Façade</td>
<td>• Age</td>
</tr>
<tr>
<td>• Poor maintenance</td>
<td>• Level of education</td>
</tr>
<tr>
<td>• Abandoned/vacant buildings</td>
<td>• Homeownership level</td>
</tr>
<tr>
<td>• Physical disorder</td>
<td>• Length of stay</td>
</tr>
<tr>
<td>• Undesirable effect</td>
<td>• Level of social cohesion among neighbors</td>
</tr>
<tr>
<td><strong>Locational Obsolescence</strong></td>
<td>• Level of income</td>
</tr>
<tr>
<td>• Market obsolescence</td>
<td>• Home value</td>
</tr>
<tr>
<td>• Decreasing in housing demand (no of new construction)</td>
<td></td>
</tr>
<tr>
<td>• Quality of location</td>
<td></td>
</tr>
<tr>
<td><strong>Contaminated Sites</strong></td>
<td><strong>Level of Crime and safety</strong></td>
</tr>
<tr>
<td>• Lack of environmental standards</td>
<td>• Level of social control neighborhood safety (victimization and fear)</td>
</tr>
<tr>
<td></td>
<td>• Level of social control neighborhood health (trash and litter)</td>
</tr>
<tr>
<td><strong>New houses in housing market</strong></td>
<td><strong>Rate of housing growth in housing market</strong></td>
</tr>
</tbody>
</table>

47
These indicators are formed the basis of the methodology of the case study. The next chapter (four) is deal with the case study application of the thesis. It will include the reason to select the case studies, methodology of the analysis in selected districts and analysis results.
Chapter 4

CASE STUDY APPLICATIONS: DATA COLLECTION AND ANALYSIS METHODS

4.1 Introduction

This chapter explores the case study of the thesis for the purpose of analyzing the effects of the abandoned/vacant houses on neighborhood residents’ satisfaction. This chapter will be composed 7 main sections. After introductory part, in section 4.2, an overview and historical development of Walled City of Famagusta is presented. In section 4.3, selection of the case study areas is explained; in 4.4 section, methodology of the analysis is presented. Analysis of physical indicators for neighborhood satisfaction is explored in 4.5 and in 4.6 section analysis of physical indicators for neighborhood satisfaction is discussed. At the end of the chapter 4, conclusion is presented.

4.2 An Overview of the Historical Development of the Walled City of Famagusta

During the Lusignan period the Walled City had become an important settlement with its harbor and defensive walls including the Othello Tower (figure 4.1). Trade was the key economic driver and this afforded a vibrant lifestyle for many of the City’s residents. Many churches and Lusignan Palace was constructed opposite to the St. Nicholas cathedral (Figure 4.2), (Luke, 1965).

![Figure 4.1: Othello Tower, URL, 4](image1)

During the Venetian period, military activities formed an important part, and this had an impact on the layout of the city. The fortifications comprised 12 bastions, a citadel (Castella) and two gates, the Ravelin (land gate) and the sea gate, both of which still exist. Residential and retail development formed the main axis created by the two

![Figure 4.2: St. Nicholas cathedrals](image2)
gates with the main square containing administrative, religious and social activities. (Gunnis, 1973).

Figure 4.3: Urban morphology in Lusignan period. (Doratlı, et al., 2003)

Figure 4.4: Urban morphology in British period. (Doratlı, et al., 2003)
The city developed in an organic manner between the two gates – Land and Sea gates. Some residential and shops were constructed around this axis. Main square, besides being the center of administrative and religious activities, was also the center in social terms.

The Ottomans invaded the city in 1571 and used it as a military base. They respected the previous cultures and used the existing buildings and modified them to suit their needs. The main axes with its two gates were also maintained as it had been during the Venetian period. They converted the existing cathedral into a mosque (Lala Mustafa Pasa Mosque) and added minarets. A shopping area was established (a bedesten and arasta). Other aspects of the physical infrastructure were developed such as a khan to accommodate those who came to the city to trade and a medresse (school) in addition to other public amenities such as fountains baths and public spaces. Generally the buildings, including a small number of large houses for leading figures in the community, employed the use of local materials and construction techniques and this gave them a sense of local identity, which blended with the surrounding development (Cobham, C.D. 1969).

According to Luke (1965), by the end of the Ottoman period, the population had significantly reduced in number, with a proliferation of empty spaces, date palms and fig trees. During the British period however, the population increased again largely due to a resurgence of trade, and for the first time the city extended beyond the walls. Within the walls new warehouses were built to create storage related to trade. Luke (1965) concludes that not all the new development was sensitive to either traditional patterns of development or local character.
In 1878 British landed on the island. The city expanded out of the walls during this period. Trade activities were in peak point during this period therefore, a number of storage buildings were constructed in the city. The neglect of existing building stock and construction of new buildings in accordance with the requirements on empty land or in place of demolished old buildings without considering the traditional pattern and characteristics were some of the negative applications of the British (Luke, 1965).

Between 1960, when the republic of Cyprus was formed, until the Turkish military intervention in 1974, the city was administered by two discreet municipalities. The Walled City was administered by a Turkish Cypriot municipality during which time very little development took place. The areas outside the walls were administered by a Greek Cypriot municipality.

Since the division of the Island of Cyprus in 1974, the overall city has been in decline, with those that can afford it preferring to live elsewhere. This has resulted in the population consisting mostly of elderly, poor and immigrant families who have no other opportunities. Most of the buildings within the walls are in a poor state of deterioration, resulting in poor living standards and low user satisfaction.

4.2.1 Districts of the Walled City of Famagusta

Based on revitalization report of Walled City of Famagusta which had been done in 2005 by Famagusta municipally, Walled city has been divided into 9 districts that each districts has a different functional, social and economical characteristics and specific activities. In the following lines each districts will be explained in a brief (Famagusta Municipality Report, 2005), (Figure 4.5):
Figure 4.5: Districts of the Walled City of Famagusta (Famagusta Municipality Revitalization Report 2005, edited by author 2013)
District 1: Main Commercial Area

This district is located at the center of the Walled City also is the biggest and most dynamic area in the city (Figure 4.6). Commercial, public spaces, cultural and historical activities are taking place in this district.

Figure 4.6: District 1, Dynamic Area (Author, 2013)

Figure 4.7: District 1, Lala Mustafa Pasa mosque and Namik Kemal square, public space and cultural and historical area (Author, 2013)

Figure 4.8: District 1, Istiklal road, commercial area (Author, 2013)
District 2: Commercial and Housing Area

This district is located at south of the Walled City. Residential buildings and commercial activities are dominating in this district.

Figure 4.9: District 2, residential area (Author, 2013)

District 3: Housing Area

This district is located in the southwest of the city. This area has dense housing patterns that mostly have inner garden housing types.

Figure 4.10: District 3
District 4: Housing Area

This area has the densest housing pattern also has apartment type houses. Due to housing the most housing units, it has higher population in the whole Walled City.

Figure 4.11: District 4 (Author, 2013)

District 5: Historical Area and Open Lands

This district is located at Canbulat Gate area. District 5 is consisted by open lands and historical buildings.

District 6: Historical Area and Open Lands

On the northeast corner of the Walled City, Famagusta sport club, football field, kindergarten, primary school and open lands are main buildings and area in this district. In addition, there are monumental ruined buildings and old cemetery from ottoman period.
District 7: Historical Area and Open Lands

On the northwest of the Walled City, a considerably large area is occupied by the military; open lands and ruined monumental buildings.
Figure 4.14: District 8, walls, ditch and towers

District 9: Old Harbor

The old harbor, which assisted centuries for Walled City, is the only harbor that opens to the sea.

Figure 4.15: District 9, harbor

4.3 Selection of the Case Study Areas

Based on the main aim of the thesis, it is needed to select housing areas for determining their satisfaction. Therefore, three main housing districts that had been determined also by Famagusta Municipality are selected as the case study areas.
Accordingly, district 2, 3 and 4 are three case study areas for this study (See figure 4.5).

**District 2**, as mentioned in 4.2, is located at northeast of Akkule Gate. Residential buildings mostly dominating this district and commercial activities are located near to Akkule entrance Gate. In this area some buildings are renovated and some others have been lost their characters. **District 3** has the specific position as an urban housing pattern. It has dense housing patterns, which mostly they have inner garden housing types and **District 4** is mostly dominating by municipality housing units by consideration of other two districts. It has the highest density-housing pattern with one or two story and apartment type houses. This district has the most housing units and population in the whole Walled City.

### 4.4 Methodology of the Analysis of Case Study

As discussed in chapter 3, neighborhood satisfaction is an intangible concept. It has combination of multiple factors including levels of façade condition, aesthetic quality, crime, health and quality of location access to transportation, parks and recreational facilities, and occupational opportunities. The most straightforward measure of neighborhood quality is a rating by residents of their levels of satisfaction with where they live. Determining the causes of this satisfaction or dissatisfaction can be useful in directing policy makers as to how communities might be improved. Resident perceptions are subjective, but nonetheless provide a simple measure of neighborhood satisfaction.

As it has been discussed at the end of chapter 3, in order to determine the effect of the housing abandonment on neighborhood satisfaction in the Walled City of
Famagusta, it is essential to conduct through analysis. Based on this relation (see table 3.3 in chapter 3), each indicator needs to be analyzed for the purpose of this thesis. Therefore, following table is provided for showing meaning and measurement units of each selected indicators for analyzing the effect of housing abandonment on neighborhood satisfaction (Table 4.1).

Accordingly, in this chapter, three housing districts are analyzed through physical environment analysis and socio-economic environment analysis. The following section explains the data collection and the methodology of the analysis carried out for these indicators:

**4.4.1 Analysis of Physical Environment**

As it can be followed from Table 4.1 there are three main indicators for physical analysis: aesthetic and housing quality of houses and physical decay, locational obsolescence and contaminated sites. All these analysis are done through physical analysis in this study.
Table 4.1: Meaning, measurement units of each selected indicators for housing abandonment and neighborhood satisfaction.

<table>
<thead>
<tr>
<th>Physical neighborhood satisfaction indicators</th>
<th>How it is compiled.</th>
<th>What data are needed?</th>
<th>Required analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deteriorated facade</td>
<td>The percentage of façade condition in residential areas.</td>
<td>Façade condition analysis</td>
<td></td>
</tr>
<tr>
<td>Poor maintenance and upkeep</td>
<td>The percentage of Structural condition of houses in residential areas.</td>
<td>Structural condition analysis</td>
<td></td>
</tr>
<tr>
<td>Abandoned/vacant buildings</td>
<td>The percentage of vacant houses in residential areas.</td>
<td>Vacant buildings analysis Land use analysis</td>
<td></td>
</tr>
<tr>
<td>Physical disorder of abandoned/vacant buildings</td>
<td>The percentage physical disorder of abandoned/vacant houses in residential areas.</td>
<td>Façade condition analysis Structural condition analysis</td>
<td></td>
</tr>
<tr>
<td>Quality of location</td>
<td>Determining the quality of residential districts with other districts</td>
<td>Locational analysis Land use analysis</td>
<td></td>
</tr>
<tr>
<td>Market obsolescence</td>
<td>Listed of reasons for market obsolescence in residential areas of walled city.</td>
<td>Interview Estate agents</td>
<td></td>
</tr>
<tr>
<td>Decreasing in housing demand</td>
<td>The percentage of decreasing housing demand in residential area.</td>
<td>Questionnaire survey Estate agents</td>
<td></td>
</tr>
<tr>
<td>Lack of environmental standards</td>
<td>Number of contaminated sites.</td>
<td>Land use analysis</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Socio-economic neighborhood satisfaction indicators</th>
<th>How it is compiled.</th>
<th>What data are needed?</th>
<th>Required analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>The percentage of respondents ranging in age from small children to the elderly.</td>
<td>Questionnaire survey</td>
<td></td>
</tr>
<tr>
<td>Level of education</td>
<td>The education level percentage from below school to university of respondents in residential areas.</td>
<td>Questionnaire survey</td>
<td></td>
</tr>
<tr>
<td>Level of Homeownership</td>
<td>The percentage of people in homeownership level: owner occupied or tenant</td>
<td>Questionnaire survey</td>
<td></td>
</tr>
<tr>
<td>Length of stay</td>
<td>The percentage of length duration of respondents in the residential neighborhood.</td>
<td>Questionnaire survey</td>
<td></td>
</tr>
<tr>
<td>Level of social cohesion (support) among neighbors</td>
<td>The percentage level of social cohesion of respondents with their neighbors.</td>
<td>Questionnaire survey</td>
<td></td>
</tr>
<tr>
<td>Level of income</td>
<td>The percentage level on income of respondents in good, fair and poor categories.</td>
<td>Questionnaire survey</td>
<td></td>
</tr>
<tr>
<td>Home value</td>
<td>The percentage home value of houses point of view of respondents</td>
<td>Questionnaire survey Estate agents</td>
<td></td>
</tr>
<tr>
<td>Lack of social control, level of safety (victimization and fear)</td>
<td>The percentage safety problems in the residential areas. (Influence of existing vacant/abandonment houses in the neighborhood)</td>
<td>Questionnaire survey</td>
<td></td>
</tr>
<tr>
<td>Lack of social control, level of health (liter and trash)</td>
<td>The percentage health problems in the residential areas. (Influence of existing vacant/abandonment houses in the neighborhood)</td>
<td>Questionnaire survey</td>
<td></td>
</tr>
<tr>
<td>Rate of the new housing growth</td>
<td>The percentage of new housing growth</td>
<td>Questionnaire survey Estate agents</td>
<td></td>
</tr>
</tbody>
</table>
A. Aesthetic and Housing Quality of Houses and Physical Decay

This analysis helped to determine lack of aesthetic quality, housing quality and physical decay in case study areas through analyzing façade condition, structural condition, abandoned/vacant buildings, physical disorder and physical undesirable effects of abandoned/vacant houses.

A1) Façade Condition Analysis is determined with help of site survey. For this analysis, city map is used and different façade condition is marked with different colors on the map. Through the analysis of façades condition analysis in the areas, facades have categorized into three headings:

1. Old buildings with preserved facade,
2. Old buildings with less deteriorated facade,
3. Old buildings with very poor facade.

A2) Structural Condition Analysis helps to determine deteriorated structure or poor maintenance in the case study area with help of site survey. For this analysis, city map is used and different structure condition is marked with different colors on the map. Through the analysis of structural conditions are analyzed in the site, accordingly the structure have categorized into three headings:

1. Old buildings with preserved structure,
2. Old buildings with less deteriorated structure,
3. Old buildings with very poor structure.

A3) Abandoned/Vacant Buildings Analysis is determined with the help of vacant
building analysis and land use analysis. The percentage of vacant buildings will be stated in each case study districts

A4) Physical Disorder Analysis is determined with help of site survey. For this analysis, city map is used, the buildings that have a physical disorder is marked with a specific color in the map.

A5) Physical Undesirable Effects of Abandoned/Vacant Houses on Neighborhood Satisfaction Analysis helps to determine through physical undesirable effects such as deteriorated structure, poor facade, open door and windows and trash with help of questionnaire survey.

B. Locational Obsolescence Analysis

Data for quality of location, market obsolescence and deceasing in housing demand will be gathered through interview and functional analysis. For the interview 7 state agencies were visited. There are: Velocity state, Home state, Remax state, Medcoas state, Erbatu state, Ince state, Sato state.

C. Contaminated Sites

The existence of contaminated site is one of the indicators for physical neighborhood satisfaction, for this analysis land use analysis is done.

4.4.2 Analysis of Socio-economic Environment

This analysis is important to find out the data about social and economic structure of the case study areas that help to discuss their impacts on neighborhood satisfaction. According to housing abandonment and neighborhood satisfaction relation, this dimension has three sub-headings (see Table 4.1).
A. Level of Place Attachment

This analysis provides data about the demographic structures of residents within the residential districts, the existing homeownership level, level of neighborhood income, social cohesion among neighbors, home value for the level of attachment of residents in the neighborhood for determining neighborhood satisfaction.

B. Level of Safety and Health

This analysis requires for data for level of safety and health of the selected districts for neighborhood satisfaction by considering of abandoned/vacant houses in the neighborhood.

C. New Houses in Housing Market

New houses in housing market is also one of the indicators that effecting to housing abandonment. For the purpose of socio-economic environment analysis, in addition to documentary research, a questionnaire survey is conducted. For the questionnaire survey, questions that are related to the subject of the thesis were selected from literature. Thus, a questionnaire is prepared for this research for determining the respondent’s level of satisfaction by living consideration of abandoned/vacant houses in the neighborhood.

For the purpose of the thesis, the residents who are currently living in the Walled City and especially in these housing districts are selected. 64 questionnaires in total are completed in three case study areas; questionnaires are conducted randomly from 1 unit among 5 units in each district. So approximately, 20% of the total residents in each district are questioned. Therefore, the number of questionnaires is changing according to the number of total units in each district. 17 questionnaires for District
2, 22 questionnaires for District 3 and 25 questionnaires for District 4 are completed in total (Table 4.2).

Table 4.2: Total number of completed questionnaires according to three districts.

<table>
<thead>
<tr>
<th>District</th>
<th>Number of buildings</th>
<th>Number of abandoned/vacant buildings</th>
<th>Number of questioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>District 2</td>
<td>92</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>District 3</td>
<td>138</td>
<td>33</td>
<td>22</td>
</tr>
<tr>
<td>District 4</td>
<td>158</td>
<td>26</td>
<td>25</td>
</tr>
</tbody>
</table>

The questionnaire survey included 18 questions. In addition, 5 questions were asked to state agencies for determining market and locational obsolescence analyses are included in the questionnaire survey (See Appendix 1 for questionnaire samples).

SPSS program is used for the evaluation of the questionnaires. The results of the questionnaires are entered and the results are shown in the table, bar and pie charts.

**4.5 Analysis of Physical Indicators for Neighborhood Satisfaction**

As mentioned in previous lines, with the help of physical analysis is determined physical and functional neighborhood satisfactions of the selected residential areas. In the following section, the results of the physical and functional analysis are presented.

**4.5.1 Analysis of Aesthetic and Housing Quality of Houses and Physical Decay**

In the following lines, deteriorated facades, poor maintained and upkeep, abandoned/vacant buildings in residential districts, physical disorder of abandoned/vacant buildings in the selected residential areas and physical undesirable effects of abandoned/vacant houses on neighborhood satisfaction are explained.
4.5.1.1 Deteriorated Façade Analysis in Residential Districts

Regarding to façade analysis, façade condition (Figure 4.16) in District 2, 34% of buildings have deteriorated/poor facades, 39% have less deteriorated facades and 25% have good, preserved façade. In District 3, 47% of buildings have deteriorated/poor facades, 31% have less deteriorated facades and 22% have good, preserved façade. In District 4, 45% of buildings have deteriorated/poor facades, 32% have less deteriorated facades and 23% have good, preserved façade (Table 4.3).

Table 4.3: Deteriorated façade analysis in residential districts

<table>
<thead>
<tr>
<th>Districts</th>
<th>Preserved façades</th>
<th>Less deteriorated facades</th>
<th>Deteriorated/poor facades</th>
</tr>
</thead>
<tbody>
<tr>
<td>District 2</td>
<td>25%</td>
<td>39%</td>
<td>34%</td>
</tr>
<tr>
<td>District 3</td>
<td>22%</td>
<td>31%</td>
<td>47%</td>
</tr>
<tr>
<td>District 4</td>
<td>23%</td>
<td>32%</td>
<td>45%</td>
</tr>
<tr>
<td>Total</td>
<td>23%</td>
<td>33%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Conclusively, 44% of buildings have deteriorated/poor facades, 33% have less deteriorated facades and 23% have good, preserved façade are existing in total residential districts. Based on this analysis, deteriorated façade in district 2 is %34, %47 in district 3 and %45 in district 4.

According to previous theoretical discussions, façade and aesthetic conditions are very important for both abandonment reasons as well as neighborhood satisfaction. Regarding to façade condition analysis 44% of residential buildings have deteriorated/poor facade conditions, so it affects users visual and physical appearance desires in a negative way.
Figure 4.16. Façade condition analysis for deteriorated façade in residential districts of Walled City
4.5.1.2 Poor Maintenance and Upkeep Analysis in Residential Districts

Poor maintenance and upkeep is one of the indicators for determining physical neighborhood satisfaction (see Table 4.1). For this indicator, it is found that in district 2, 26% of buildings have preserved structure conditions, 40% have less deteriorated structure condition and 34% have deteriorated/poor structural conditions. In district 3, 22% of buildings have excellent conditions, 36% have good structural condition and 42% have poor structural conditions. In district 4, 30% of buildings have excellent conditions, 34% have good structural condition and 36% have poor structural conditions (Table 4.4).

Table 4.4. Poor maintenance and upkeep in residential districts

<table>
<thead>
<tr>
<th>Districts</th>
<th>Preserved Excellent</th>
<th>Less deteriorated structure</th>
<th>Deteriorated/poor structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>District 2</td>
<td>%26</td>
<td>%40</td>
<td>%34</td>
</tr>
<tr>
<td>District 3</td>
<td>%22</td>
<td>%36</td>
<td>%42</td>
</tr>
<tr>
<td>District 4</td>
<td>%30</td>
<td>%34</td>
<td>%36</td>
</tr>
<tr>
<td>Total</td>
<td>%26</td>
<td>%36</td>
<td>%38</td>
</tr>
</tbody>
</table>

Conclusively, 26% of buildings have preserved structural conditions, 36% have less deteriorated structural conditions and 38% have deteriorated/poor structural conditions in the selected residential districts. Based on this analysis, deteriorated structure in District 2 is %34, %42 in District 3 and %36 in District 4 (Figure 4.17). This analysis has been done to emphasize that poor maintenance and upkeep affect to the structural conditions deterioration, by consideration to table below 38% of residential building in selected districts have deteriorated/poor structure, so this results are important for neighborhood satisfaction.
Figure 4.17. Structural condition analysis for poor maintenance and upkeep in residential districts

Results:
- District 1: 26% preserved structure, 40% less deteriorated structure, 34% deteriorated/poor structural
- District 2: 22% preserved structure, 36% less deteriorated structure, 42% deteriorated/poor structural
- District 3: 30% preserved structure, 34% less deteriorated structure, 36% deteriorated/poor structural
- Total: 28% preserved structure, 38% less deteriorated structure, 38% deteriorated/poor structural.
4.5.1.3 Abandoned/Vacant Buildings in Residential Districts

According to the site survey that carried by author of the thesis, it is seen that, in District 2, 11% of the residential buildings are abandoned/vacant, in District 3, 23% and in District 4, 17% of the District is abandoned/vacant houses are existed. In total 18% of the residential building in selected districts are abandoned/vacant (Figure 4.18).

This analysis shows the percentage of the abandoned/vacant residential units in the districts and in total 18% of them are abandoned, nearly to one over five, residential houses are abandoned/vacant. Due to this result it is concluded that in these areas the amount of abandonment is high so according to thesis aim it affects neighborhood satisfaction and resident to be dissatisfy for exciting abandoned/vacant buildings in the neighborhood.

4.5.1.4 Physical Disorder of Abandoned/Vacant Houses

Physical disorder is conducted from poor façade condition and deteriorated structure condition of abandoned/vacant houses. Regarding the site survey, from number of abandoned/vacant houses in District 2, 60%, in District 3, 76% and in District 4, 72% of them have physical disorder (Figure 4.19).

By regarding to results of the physical disorder of abandoned/vacant houses in case study area, it shows that most of the building are suffering from poor façade and deteriorated façade structure that affects to neighborhood satisfaction.
Figure 4.18. Abandoned/Vacant Buildings In Residential Districts of Walled City

Abandoned/Vacant Buildings

Results
District 2: 11% residential abandonment
District 3: 33% residential abandonment
District 4: 17% residential abandonment
Total: 18%

Figure 4.18. Abandoned/Vacant Buildings In Residential Districts
Figure 4.19: Physical disorder of abandoned/vacant houses in the Walled City.
4.5.1.5 Physical Undesirable Effects of Abandoned/Vacant Houses on Neighborhood Satisfaction

Regarding to questionnaire survey results about the question that ‘What are the physical undesirable effects of abandoned/ vacant houses on your district?’ 17.2% of respondents replied trash, 12.5% answered broken windows as well as open doors (Figure 4.20 and 4.21), majority of respondents (37.5%) replied poor façade and 17.2% were deteriorated structures (Figure 4.22).

Figure 4.20: An abandon house with no door, broken window, deteriorated façade and structure and trash inside (Author, 2013)

Figure 4.21: An abandon house without door and trash inside (Author, 2013)
Physical undesirable effects of abandoned/vacant houses in case study area shows that deteriorated structures, poor facades, trash and other undesirable points are encouraging in a negative way on neighborhood residents to abandon or moving out from neighborhood.

4.5.2 Locational Obsolescence Analysis

In the following lines, quality of location, market obsolescence and decreasing in housing in the selected case study areas are explained. The analysis results are obtained from both physical and social analysis (See table 4.1).

4.5.2.1 Quality of Location

The Walled City of Famagusta is located eastern coast of the Island behind the Famagusta harbor (Figure 4.23). As before mentioned residential 3 districts are going to be considered for this study. Accordingly residential district 2, is located on the south of the Walled City and residential districts 3 and 4 are located on the north direction of the Walled City (Figure 4.24).
Figure 4.23: Location of Walled City in Famagusta City (Famagusta Municipality Revitalization Report 2005).

Figure 4.24: Location of the selected districts, accesses from the outside of walls and entrance gates in the Walled City (Famagusta Municipality Revitalization Report 2005, edited by author 2013).
District 2 is located on the south of the Walled City, one of the important gates of Walled city is Akkule gate (Land gate), (Figure 4.25) that located near to this district.

![Figure 4.25: Akkule gate (Land gate), main entrance to district 2 and 3](image)

By regarding to, land use analysis (See Figure 4.26) this district is far away from public spaces and leisure activities and also most of the educational units are far away from it.

Districts 3 is also located next to the Akkule gate (Land gate), this districts is also far from public and active spaces and educational units. Also there is only one Park (Desdemona park) existing in the Walled City (between district 1 and 9) that it is far away from all three residential districts (Figure 4.27).
Figure 4.26: Land use analysis for quality of location (Scanned from Oktay.V.B Phd thesis, 2005)
District 4 is located on the north direction of the Walled City and from Canbulat gate (Sea gate), (Figure 4.28) can be entered to this district (See figure 4.24).
Quality of the location is one of the important factors for the homebuyers and residents. As mentioned above residential districts of case study are far from educational, active spaces and recreational units, city center and other facilities. This quality of location directly or indirectly affects to neighborhood satisfaction and dissatisfaction also their decision for moving out or not.

4.5.2.2 Market Obsolescence

Aforementioned in section 4.4.1.2, this analysis is conducted through interview with 7 state agencies; the question for market obsolescence was “What are the reasons for market obsolescence in the Walled City?” Various reasons stated in this question such as: because of old buildings with deteriorated facades and structure conditions, lack of recreational facilities and entertainment, lack of public transportation and being away from city center. Due to these reasons homebuyers and investors are not willing to buy or invest in the Walled City.

4.5.2.3 Decreasing in Housing Demand

For this analysis state agencies replied to the question “What is the level of housing demand in the Walled City?” 57% answered low demand and 43% replied no demand. None of respondents found the level of housing demand in the Walled City intermediate demand or high demand (Figure 4.29).

Decreasing in housing demand is one of the locational obsolescence components, according to 2.4.1.2 section it occurs when the area become less demand place to live and physically not attractive to live or invest so this component plays a major role in housing abandonment.
4.5.3 Contaminated Sites

Contaminated sites are results of the lack of environmental standards; this analysis results obtained from vacant lands and abandoned/vacant houses. For this analysis a land use map is provided (Figure 4.30).

This analysis shows that in the case study areas there are vacant houses and open lands that are contaminated sites with incompatible uses such as trash and construction wasted materials they are lost spaces. So existing of these sites in the residential districts are affecting to neighborhood dissatisfaction.
Contaminated Sites Analysis in The Residential Districts of Walled City

Results
There are vacant houses and open lands that are contaminated sites with incompatible use such as trash and construction waste materials they are lost spaces.

Figure 4.30: Contaminated sites analysis
4.6 Analysis of Socio-economic Indicators for Neighborhood Satisfaction

Socio-economic neighborhood satisfaction indicators have three main sub-headings such as place attachment, health and safety and new houses in housing market. In order to reach these informations, socio-economic analysis is conducted to have idea about age, level of income, education, safety, health and etc. in the selected districts.

Besides these indicators, it is believed that there is needed for some other informations in order to see the overall social condition of areas. Therefore, sex, marital status, employment and nationality are some other additional informations gathered during the questionnaire survey.

4.6.1 Level of Place Attachment

In the following lines the factors of the place attachment in the form of the sex, age, marital status, education level, employment status, nationality, level of homeownership, length of stay, neighborhood income level and home values are presented to construct the level of place attachment for exploring neighborhood satisfaction in abandoned/vacant houses in residential districts in the Walled city of Famagusta.

4.6.1.1 Age

Regarding age analysis, respondents who are between 9-16 have 1.6%, 45-54 ages have 18.8% of total respondents (Figure 4.31). Cross tabulation between age and districts shows in each district, which ranges of age are living (Table 4.5).

According to theoretical investigation in chapter 2 about age distribution, the families with young age distribution are likely to leave the old cities to more active and dynamic neighborhoods for education and job purposes. In age distribution analysis results it appears that most of the responses are consist of middle age to
elderly people. From this analysis it can be concluded than younger people are less satisfied from the middle age to elderly people.

Figure 4.31: Age in three districts

Table 4.5: Cross tabulation between age and districts

<table>
<thead>
<tr>
<th>Age</th>
<th>% within Age</th>
<th>% within District</th>
<th>% of Total</th>
<th>District2</th>
<th>District3</th>
<th>District4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-16</td>
<td>100.0%</td>
<td>5.9%</td>
<td>1.6%</td>
<td>100.0%</td>
<td>1.6%</td>
<td>1.6%</td>
<td></td>
</tr>
<tr>
<td>17-24</td>
<td>14.3%</td>
<td>17.4%</td>
<td>3.1%</td>
<td>30.0%</td>
<td>17.6%</td>
<td>4.7%</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>27.3%</td>
<td>21.7%</td>
<td>4.7%</td>
<td>30.0%</td>
<td>17.6%</td>
<td>4.7%</td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>17.6%</td>
<td>21.7%</td>
<td>4.7%</td>
<td>17.6%</td>
<td>21.7%</td>
<td>4.7%</td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>25.0%</td>
<td>25.0%</td>
<td>5.9%</td>
<td>25.0%</td>
<td>25.0%</td>
<td>5.9%</td>
<td></td>
</tr>
<tr>
<td>55-64</td>
<td>20.0%</td>
<td>20.0%</td>
<td>5.9%</td>
<td>20.0%</td>
<td>20.0%</td>
<td>5.9%</td>
<td></td>
</tr>
<tr>
<td>65-74</td>
<td>37.5%</td>
<td>37.5%</td>
<td>3.1%</td>
<td>37.5%</td>
<td>37.5%</td>
<td>3.1%</td>
<td></td>
</tr>
<tr>
<td>Over</td>
<td>20.0%</td>
<td>35.9%</td>
<td>37.5%</td>
<td>20.0%</td>
<td>35.9%</td>
<td>37.5%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26.6%</td>
<td>35.9%</td>
<td>37.5%</td>
<td>26.6%</td>
<td>35.9%</td>
<td>37.5%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Sex

As it is discussed above, sex, marital status, employment and nationality are other important demographic indicators. Therefore, these analysis results are given below.

Regarding to results of questionnaire in total there are 48.4% male and 51.6% female in three residential districts (figure 4.32). According to cross tabulation between three districts and sex in district 2, there are 41.2% of male and 58.8% female, in district 3, 47.8% of male and 52.2% female and in district 4, of 54.2% male and 45.8% of female (Table 4.6).

Figure 4.32: Sex in three districts

Table 4.6: Cross tabulation between districts and sex

<table>
<thead>
<tr>
<th>District * Sex Crosstabulation</th>
<th>Sex</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>District2</td>
<td>% within District</td>
<td>41.2%</td>
</tr>
<tr>
<td>% within Sex</td>
<td>22.6%</td>
<td>30.3%</td>
</tr>
<tr>
<td>% of Total</td>
<td>10.9%</td>
<td>15.6%</td>
</tr>
<tr>
<td>District3</td>
<td>% within District</td>
<td>47.8%</td>
</tr>
<tr>
<td>% within Sex</td>
<td>35.5%</td>
<td>36.4%</td>
</tr>
<tr>
<td>% of Total</td>
<td>17.2%</td>
<td>18.8%</td>
</tr>
<tr>
<td>District4</td>
<td>% within District</td>
<td>54.2%</td>
</tr>
<tr>
<td>% within Sex</td>
<td>41.9%</td>
<td>33.3%</td>
</tr>
<tr>
<td>% of Total</td>
<td>20.3%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Total</td>
<td>% within District</td>
<td>48.4%</td>
</tr>
<tr>
<td>% within Sex</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>48.4%</td>
<td>51.6%</td>
</tr>
</tbody>
</table>
## Marital Status

Regarding to **marital status**, more than half of the respondents (54.7%) are married, 21.9% are single, 18.8% are widowed and small portion (4.7%) are divorced (Figure 4.33). Table 4.7 shows cross tabulation between marital status and districts in detail.

![Figure 4.33: Marital Status in three districts](image)

<table>
<thead>
<tr>
<th>Marital Status * District Crosstabulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Status</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Married</td>
</tr>
<tr>
<td>% within Marital Status</td>
</tr>
<tr>
<td>% within District</td>
</tr>
<tr>
<td>% of Total</td>
</tr>
<tr>
<td>Single</td>
</tr>
<tr>
<td>% within Marital Status</td>
</tr>
<tr>
<td>% within District</td>
</tr>
<tr>
<td>% of Total</td>
</tr>
<tr>
<td>Widowed</td>
</tr>
<tr>
<td>% within Marital Status</td>
</tr>
<tr>
<td>% within District</td>
</tr>
<tr>
<td>% of Total</td>
</tr>
<tr>
<td>Divorced</td>
</tr>
<tr>
<td>% within Marital Status</td>
</tr>
<tr>
<td>% within District</td>
</tr>
<tr>
<td>% of Total</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>% within Marital Status</td>
</tr>
<tr>
<td>% within District</td>
</tr>
<tr>
<td>% of Total</td>
</tr>
</tbody>
</table>
Employment Status

According to employment status analysis, vast majority of respondents (32.8%) are housewives in whole districts. In addition to them, 4.7% of people are own account non-professional and 3.1% are unskilled workers and 6.3% are skilled workers. There are 20.3% employed, 17.2% are unemployed and 15.6% are retired people (Figure 4.34).

![Employment Status in three districts](image)

By regarding to figure 4.35, employment status, 65% (housewife, retired and unemployed) of respondents financially are not active people; therefore it can be figured out that minus people of the respondents are working regularly in the residential districts of the Walled City. In this part can be concluded that the people who are working regularly, do not satisfied or prefer to live in the Walled City.
Nationality

Regarding **nationality** analysis, almost more than half of the respondents (51.6%) are from TRNC and 25% is Turkish-TRNC, in addition 18.8% of people are Turkish and very small portion (4.7%) are from other nationalities (Figure 4.35).

![Nationality Pie Chart]

**Figure 4.35: Nationality in three districts**

4.6.1.2 Education Level

The majority of the respondents (46.9%) are graduated from high school and 9.4% from university. There are 4.7% people who never went to school and 9.4% are also never gone to school but knows reading. 9.4% have graduated from primary level and 18.8% are from secondary level and only small portion (1.6%) are graduated from master degree (Figure 4.36).
According to cross tabulation between age and education level (Table 4.8) %66.7 of the respondents who are over 75 are never went to school and the rest (%33.3) belong to the age range between 65-74. In other words the respondents who are in the age between 45 and 75+ have primary education level and under it and the age of 9 and 44 have secondary school and high school levels. In brief, it can be conducted that younger people have higher education level than older people in these areas.

By regarding to figure 4.36 the people who are educated from university by comparing to high school and under it, has a low rate so it can be concluded that the respondents with higher level of education are not willing or satisfied to live in the residential districts of the Walled City, they prefer to live out side of the Walled City or near to their education area.
### Table 4.8: Cross tabulation between age and education

<table>
<thead>
<tr>
<th>Age</th>
<th>% within Age</th>
<th>% within Education</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never went to school</td>
<td>Never went to school but knows reading</td>
<td>Primar y</td>
</tr>
<tr>
<td>9-16</td>
<td>100.0%</td>
<td>3.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7-24</td>
<td>57.1%</td>
<td>42.9%</td>
</tr>
<tr>
<td></td>
<td>25-34</td>
<td>10.0%</td>
<td>70.0%</td>
</tr>
<tr>
<td></td>
<td>35-44</td>
<td>36.4%</td>
<td>63.6%</td>
</tr>
<tr>
<td></td>
<td>45-54</td>
<td>8.3%</td>
<td>25.0%</td>
</tr>
<tr>
<td></td>
<td>55-64</td>
<td>10.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td>55-74</td>
<td>12.5%</td>
<td>37.5%</td>
</tr>
<tr>
<td></td>
<td>Over 75</td>
<td>40.0%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Total</td>
<td>4.7%</td>
<td>9.4%</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

### 4.6.1.3 Level of Homeownership

Regarding tenure in residential districts, 57.8% of the interviewed people are owner occupied and 42.2% are tenants (Figure 4.37). According to cross tabulation table (Table 4.9) between nationality and tenure, 78.8% people from TRNC are owner occupied and 75% of Turkish people are tenants. Additionally from this table it is concluded that the people are owner occupied are from KKTC and more attached to their neighborhood than the other respondents. It is obvious that owner occupied respondents are more satisfied to live in neighborhood than tenants.
4.6.1.4 Length of Stay

According to result of the questionnaire survey, it is found that, people who have owner occupied tenure are the ones living longer in the area (Figure 4.38). Cross tabulation (Table 4.10) between tenure and habitation shows that tenure between 16-20 are owner occupied with 29.7% and habitation between 3-5 are mostly tenants with 40.7%.

---

Table 4.9: Cross tabulation between nationality and tenure

<table>
<thead>
<tr>
<th>What is your nationality?</th>
<th>% within What is your nationality?</th>
<th>% within What is your tenure?</th>
<th>% of Total</th>
<th>Owner occupied</th>
<th>Tenant</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRNC</td>
<td>78.8%</td>
<td>21.2%</td>
<td>100.0%</td>
<td>51.6%</td>
<td>48.4%</td>
<td>Total</td>
</tr>
<tr>
<td>Turkish</td>
<td>25.0%</td>
<td>75.0%</td>
<td>100.0%</td>
<td>18.8%</td>
<td>81.2%</td>
<td></td>
</tr>
<tr>
<td>TRNC-Turkish</td>
<td>50.0%</td>
<td>50.0%</td>
<td>100.0%</td>
<td>29.6%</td>
<td>70.4%</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>11.1%</td>
<td>88.9%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>57.8%</td>
<td>42.2%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>
As well as before mentioned the respondents with longer habitation in the neighborhood are one who are owner occupied so these respondents are more likely to live in the neighborhood than the ones are tenants and less habitation in neighborhood.

![Period of Habitation](image)

Figure 4.38: Period of habitation in three districts

**Table 4.10: Cross tabulation between tenure and habitation**

<table>
<thead>
<tr>
<th>How many years have you live in this house?</th>
<th>What is your tenure?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 % within How many years have you live in this house? % within What is your tenure? % of Total</td>
<td>Owner occupied</td>
<td>Tenant</td>
</tr>
<tr>
<td>15.6%</td>
<td>100.0%</td>
<td>15.6%</td>
</tr>
<tr>
<td>15.6%</td>
<td>37.0%</td>
<td>15.6%</td>
</tr>
<tr>
<td>20.3%</td>
<td>100.0%</td>
<td>15.6%</td>
</tr>
<tr>
<td>3-5 % within How many years have you live in this house? % within What is your tenure? % of Total</td>
<td>15.4%</td>
<td>84.6%</td>
</tr>
<tr>
<td>5.4%</td>
<td>40.7%</td>
<td>20.3%</td>
</tr>
<tr>
<td>3.1%</td>
<td>17.2%</td>
<td>20.3%</td>
</tr>
<tr>
<td>6-10 % within How many years have you live in this house? % within What is your tenure? % of Total</td>
<td>57.1%</td>
<td>42.9%</td>
</tr>
<tr>
<td>21.6%</td>
<td>22.2%</td>
<td>21.9%</td>
</tr>
<tr>
<td>12.5%</td>
<td>9.4%</td>
<td>21.9%</td>
</tr>
<tr>
<td>11-15 % within How many years have you live in this house? % within What is your tenure? % of Total</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>27.0%</td>
<td>15.6%</td>
<td>15.6%</td>
</tr>
<tr>
<td>15.6%</td>
<td>15.6%</td>
<td>15.6%</td>
</tr>
<tr>
<td>16-20 % within How many years have you live in this house? % within What is your tenure? % of Total</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>29.7%</td>
<td>17.2%</td>
<td>17.2%</td>
</tr>
<tr>
<td>17.2%</td>
<td>17.2%</td>
<td>17.2%</td>
</tr>
<tr>
<td>20+ % within How many years have you live in this house? % within What is your tenure? % of Total</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>16.2%</td>
<td>9.4%</td>
<td>9.4%</td>
</tr>
<tr>
<td>9.4%</td>
<td>9.4%</td>
<td>9.4%</td>
</tr>
<tr>
<td>Total % within How many years have you live in this house? % within What is your tenure? % of Total</td>
<td>57.8%</td>
<td>42.2%</td>
</tr>
<tr>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>57.8%</td>
<td>42.2%</td>
<td>100.0%</td>
</tr>
<tr>
<td>42.2%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
4.6.1.5 Neighborhood Income Level

According to question to respondents for their opinion about the income level of neighbors in neighborhood, it is found that 32.8% of respondents are poor, 31.3% of them are fair, 18.8% of them have no idea, 14.1% of them said good level. Additionally only small portion (3.1%) of respondents found their neighbors income level very good (Figure 4.39).

On one hand low level of income is one of the indicators for being dissatisfied from neighborhood and on the other hand for households with low level of income are hard to move out. It means that the people with high income can leave neighborhood for new houses or another neighborhood but its is not same for low level income residents, although these group of residents are dissatisfied but unfortunately it is hardly possible for moving out of the neighborhood.

![Figure 4.39: Neighborhood income level in three districts](image)

4.6.1.6 Level of Social Cohesion (Social contact)

The social contacts among neighbors help to develop strong ties between different
age groups and ethnic groups and they can share their traditions and diversity in social composition.

There is a big group with 34.4% who contact occasionally with neighbors and 28.1% contact very rarely, 7.8% do not meet their neighbors (Figure 4.40). Cross tabulation (Table 4.11) between social contacts and period of habitation shows that, the respondents who are living longer (between 16-20 and 20+ years) in the neighborhoods have more social contacts with neighbors than the people who are living less in the neighborhoods.

Regarding these results there is low level of social contacts among residents in the case areas so this also affects the overall neighborhood satisfaction.

![Social Contact Graph]

**Figure 4.40: Social contact in three districts**

*Level of happiness in the neighborhood*

Regarding the question of ‘Are you happy to live in this neighborhood?’ from respondents, 17.2% of respondents said they are happy to live in their neighborhood, 42.2% were not happy, 26.6% find them not bad and 14.1% of people had no idea (Figure 4.41).
Figure 4.41: Level of happiness in three districts

Table 4.11: Cross tabulation between Social Contacts and Period of Habitation

<table>
<thead>
<tr>
<th>How many years have you live in this house?</th>
<th>How often are you contact with your neighbors?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Every day</td>
<td>A few in a week</td>
</tr>
<tr>
<td>0-2</td>
<td>14,3%</td>
<td>14,3%</td>
</tr>
<tr>
<td>% within How many years have you live in this house?</td>
<td>100,0%</td>
<td>30,0%</td>
</tr>
<tr>
<td>3-5</td>
<td>33,3%</td>
<td>15,4%</td>
</tr>
<tr>
<td>% within How many years have you live in this house?</td>
<td>100,0%</td>
<td>30,0%</td>
</tr>
<tr>
<td>6-10</td>
<td>3,1%</td>
<td>3,1%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-15</td>
<td>40,0%</td>
<td>30,0%</td>
</tr>
<tr>
<td>% within How many years have you live in this house?</td>
<td>100,0%</td>
<td>30,0%</td>
</tr>
<tr>
<td>% within How often are you contact with your neighbors?</td>
<td>100,0%</td>
<td>30,0%</td>
</tr>
<tr>
<td>16-20</td>
<td>6,3%</td>
<td>4,7%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20+</td>
<td>33,3%</td>
<td>7,8%</td>
</tr>
<tr>
<td>% within How many years have you live in this house?</td>
<td>100,0%</td>
<td>30,0%</td>
</tr>
<tr>
<td>% within How often are you contact with your neighbors?</td>
<td>100,0%</td>
<td>30,0%</td>
</tr>
<tr>
<td>Total</td>
<td>9,4%</td>
<td>20,3%</td>
</tr>
<tr>
<td>% within How many years have you live in this house?</td>
<td>100,0%</td>
<td>30,0%</td>
</tr>
<tr>
<td>% within How often are you contact with your neighbors?</td>
<td>100,0%</td>
<td>30,0%</td>
</tr>
</tbody>
</table>

According to cross tabulation between habitation period and being happy to live in
the neighborhood  (Table 4.12), the respondents who are living between 0-2 years, are not happy (80%) to live in the neighborhood but inversely 66.7% of the people who are living more than 20 years in the neighborhood are happy. Also in analysis it is obvious that tenants who have less habitation are not happy to live and has low level of satisfaction.

### Table 4.12: Cross tabulation between How many years have you live in this house? and, Are you happy to live in this neighborhood?

<table>
<thead>
<tr>
<th>How many years have you live in this house?</th>
<th>Are you happy to live in this neighborhood?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>% within How many years have you live in this house?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>% within Are you happy to live in this neighborhood?</td>
<td>80.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>29.6%</td>
<td>5.9%</td>
</tr>
<tr>
<td>3-5</td>
<td>7.7%</td>
<td>61.5%</td>
</tr>
<tr>
<td>% within How many years have you live in this house?</td>
<td>9.1%</td>
<td>29.6%</td>
</tr>
<tr>
<td>% within Are you happy to live in this neighborhood?</td>
<td>1.6%</td>
<td>12.5%</td>
</tr>
<tr>
<td>% of Total</td>
<td>14.3%</td>
<td>42.9%</td>
</tr>
<tr>
<td>6-10</td>
<td>18.2%</td>
<td>22.2%</td>
</tr>
<tr>
<td>% within How many years have you live in this house?</td>
<td>3.1%</td>
<td>9.4%</td>
</tr>
<tr>
<td>% within Are you happy to live in this neighborhood?</td>
<td>20.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>18.2%</td>
<td>11.1%</td>
</tr>
<tr>
<td>11-15</td>
<td>3.1%</td>
<td>4.7%</td>
</tr>
<tr>
<td>% within How many years have you live in this house?</td>
<td>18.2%</td>
<td>18.2%</td>
</tr>
<tr>
<td>% within Are you happy to live in this neighborhood?</td>
<td>18.2%</td>
<td>7.4%</td>
</tr>
<tr>
<td>% of Total</td>
<td>3.1%</td>
<td>3.1%</td>
</tr>
<tr>
<td>16-20</td>
<td>3.1%</td>
<td>3.1%</td>
</tr>
<tr>
<td>% within How many years have you live in this house?</td>
<td>66.7%</td>
<td>16.7%</td>
</tr>
<tr>
<td>% within Are you happy to live in this neighborhood?</td>
<td>36.4%</td>
<td>5.9%</td>
</tr>
<tr>
<td>% of Total</td>
<td>6.2%</td>
<td>1.6%</td>
</tr>
<tr>
<td>20+</td>
<td>17.2%</td>
<td>42.2%</td>
</tr>
<tr>
<td>% within How many years have you live in this house?</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Are you happy to live in this neighborhood?</td>
<td>17.2%</td>
<td>42.2%</td>
</tr>
<tr>
<td>% of Total</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

### 4.6.1.7 Home Value

For conducting level of home value estate agencies were asked the question of “What is the level of home value (price) in the Walled City?” 71% of the respondents found intermediate value and 29% replied low value, none of the respondents replied high value (Figure 4.42).
By regarding to theoretical discussion in 3.3.2.2 part, home value depends on quality of location, façade and structural condition, neighborhood income level and etc. So the residents that have opportunity to maintain and upkeep of their houses still are more satisfied to live in the neighborhood or they might leave neighborhood for better and newer houses and neighborhood. Whereas, the residents that do not have any chance to move out or maintaining their houses begin to deteriorate and decrease the value of those houses in the neighborhood. Accordingly, such consequences directly affects to neighborhood satisfaction.

**4.6.2 Level of Safety and Health**

Level of safety and health are other main indicators that affect socio-economic satisfaction of neighborhoods.

**4.6.2.1 Neighborhood Safety**

Respondents were asked about their safety feelings by living in their neighborhood where there are abandoned/vacant houses, 12.5% of respondents replied yes about their safety feelings, vast majority of participants (42.2%) answered no to this question, 21.9% of respondents replied not bad and 23.4% have no idea about the
question (Figure 4.43).

According to cross tabulation between age and the question that “Are you feeling safe by living in this neighborhood where there are abandoned/vacant houses?” (Table 4.13) 57.1% of the respondents who are between ages of 17 and 24, do not feel safety and 80% of respondents are feeling unsafe who are between ages 25 and 34. People over 75 years (60%) of the are feeling safe by living in the neighborhood where there are abandoned/vacant houses in the neighborhood.

By regarding to the analysis results, the most of the respondents do not feel safe themselves by living in a neighborhood with abandoned/vacant buildings. By relying on two previous theoretical discussions, the users who are feeling unsafe and fear of crime in the neighborhood, it means there is low social contacts because they are less likely to go out side so less physically active, conclusively the result can be depression.
Table 4.13: Cross tabulation between Age and Are you feeling safe by living in this neighborhood that there are abandoned/vacant houses?

<table>
<thead>
<tr>
<th>Age</th>
<th>Are you feeling safe by living in this neighborhood that there are abandoned/vacant houses?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>9-16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>17-24</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>14.3%</td>
<td>57.1%</td>
</tr>
<tr>
<td>25-34</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>10.0%</td>
<td>80.0%</td>
</tr>
<tr>
<td>35-44</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>9.1%</td>
<td>36.4%</td>
</tr>
<tr>
<td>45-54</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>0.0%</td>
<td>58.3%</td>
</tr>
<tr>
<td>55-64</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>10.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>65-74</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>12.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Over</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>75</td>
<td>60.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>12.5%</td>
<td>42.2%</td>
</tr>
</tbody>
</table>

4.6.2.2 Neighborhood Health

Respondents were asked to identify their neighborhood healthy by consideration of existence of abandoned/vacant houses in their neighborhood, very small portion (3.1%) replied yes, majority (54.7%) of residents did not find their neighborhood
healthy, 21.9% of participants answered not bad and 20.3% of respondents had no idea about this question (Figure 4.44). Table 4.13: Cross tabulation between Age and Are you feeling safe by living in this neighborhood that there are abandoned/vacant houses?

![Figure 4.44: Health in three districts](image)

As discussed in chapter two, when there are abandoned/vacant buildings with open door and windows or rundown structures, there are places of trash and litter. Such unhealthy accumulations in the neighborhood are cause that 57.7% respondents find their neighborhood unhealthy and they are not satisfied by living in such neighborhood.

4.6.3 Rate of New Housing Growth

In the latest years there are enormous number of new houses in housing market so for determining the rate of the housing growth, state agencies were asked the question that “What is the level of housing growth in housing market?” 57% of respondents replied intermediate growth and 43% answered high growth, conclusively none of respondents replied the rate of the housing growth in a low level (Figure 4.45).
According to section 2.4.2.3, new houses in houses market is one of the housing abandonment reasons for the people who has financially opportunity to afford new house in housing market. Besides of housing abandonment of new houses, demographic changes, market obsolescence, decline in housing quality as well as declining in home value in Walled City.

![Figure 4.45: Level of housing growth in housing market](image)

Before giving the concluding part of the chapter, there are four additional questions that help to determining neighborhood satisfaction. In the case areas, these questions were asked for respondents for determining the reasons for living in the neighborhood, negative points of the neighborhood, rating the quality of the neighborhood and at last there were asked to rate their neighborhood overall satisfaction.

When asked to identify the reasons for living in neighborhood, among multiply questions, only 4.7% of interviewed residents answered safety reasons, 32.8% replied price of the house and 29.7% were said because of inherited (Figure 4.46).
According to cross tabulation between the tenure and the most important consideration to prefer to live in neighborhood (Table 4.14), the residents who replied price are tenant (85.7%). Home amenities, inherited and safety are answered from owner occupied residents (100%).

This question is important for analyzing the level of the neighborhood satisfaction because according to results most of the tenants are prefer to live in Walled City because of reasonable and low rent prices. So it shows that users economically have to live in this neighborhood, it means that these residents physically and socially do not satisfy to live in the neighborhood.

Figure 4.46: Reasons of living in three districts
Table 4.14: Cross tabulation between the tenure and the most important consideration to prefer to live in neighborhood

<table>
<thead>
<tr>
<th>What is the most important consideration to prefer to live in this area?</th>
<th>What is your tenure?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owner occupied</td>
<td>Tenant</td>
</tr>
<tr>
<td>Price</td>
<td>% within What is the most important consideration to prefer to live in this area?</td>
<td>% within What is your tenure?</td>
</tr>
<tr>
<td>% of Total</td>
<td>14.3%</td>
<td>85.7%</td>
</tr>
<tr>
<td></td>
<td>8.1%</td>
<td>66.7%</td>
</tr>
<tr>
<td></td>
<td>4.7%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Location</td>
<td>% within What is the most important consideration to prefer to live in this area?</td>
<td>% within What is your tenure?</td>
</tr>
<tr>
<td>% of Total</td>
<td>42.9%</td>
<td>57.1%</td>
</tr>
<tr>
<td></td>
<td>8.1%</td>
<td>14.8%</td>
</tr>
<tr>
<td></td>
<td>4.7%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Home amenities</td>
<td>% within What is the most important consideration to prefer to live in this area?</td>
<td>% within What is your tenure?</td>
</tr>
<tr>
<td>% of Total</td>
<td>100.0%</td>
<td>13.5%</td>
</tr>
<tr>
<td></td>
<td>13.5%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Proximity to work, school, public transportation and to shopping</td>
<td>% within What is the most important consideration to prefer to live in this area?</td>
<td>% within What is your tenure?</td>
</tr>
<tr>
<td>% of Total</td>
<td>44.4%</td>
<td>55.6%</td>
</tr>
<tr>
<td></td>
<td>10.8%</td>
<td>18.5%</td>
</tr>
<tr>
<td></td>
<td>6.2%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Inherited</td>
<td>% within What is the most important consideration to prefer to live in this area?</td>
<td>% within What is your tenure?</td>
</tr>
<tr>
<td>% of Total</td>
<td>100.0%</td>
<td>51.4%</td>
</tr>
<tr>
<td></td>
<td>51.4%</td>
<td>29.7%</td>
</tr>
<tr>
<td>Safety</td>
<td>% within What is the most important consideration to prefer to live in this area?</td>
<td>% within What is your tenure?</td>
</tr>
<tr>
<td>% of Total</td>
<td>100.0%</td>
<td>8.1%</td>
</tr>
<tr>
<td></td>
<td>8.1%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Total</td>
<td>% within What is the most important consideration to prefer to live in this area?</td>
<td>% within What is your tenure?</td>
</tr>
<tr>
<td>% of Total</td>
<td>57.8%</td>
<td>42.2%</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>57.8%</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>42.2%</td>
</tr>
</tbody>
</table>

According to question to respondents for their opinion about the negative point of their neighborhood, more than half of the respondents (51.6%) found Abandoned/vacant houses in the neighborhood has a negative affect on their neighborhood and the rest are 15.6% health problem, 21.9% safety problem, and 10.9% replied none (Figure 4.47).
The respondents were asked to rate their *neighborhood quality*, building quality and social live quality points of their neighborhood. As it can be seen from the result, big portion (51.6%) of interviewed residents in selected districts found their neighborhood quality in intermediate level, 43.8% replied in poor quality and only 4.7% of respondents found their neighborhood in high quality (Figure 4.48). So from finding it can be concluded that resident are not satisfied with the overall quality of neighborhood.

![Figure 4.47: Negative points of neighborhood in three districts](image1)

![Figure 4.48: Neighborhood quality in three districts](image2)
Lastly respondents were asked for evaluating about *the overall neighborhood satisfaction* with their current neighborhood, 43.8% of respondents were not satisfied, 31.3% were somewhat satisfied and 20.8% were not sure and only very small percentage (4.7%) were very satisfied (Figure 4.49).

Regarding to cross tabulation between quality of the building in neighborhood and satisfaction with the quality of life in neighborhood, it can be conducted that both quality and satisfaction has a direct relation with together, for instance 66.7% of the resident are very satisfied are among the residents who are replied their neighborhood has high quality. 75% are not satisfied who find their neighborhood in a poor quality (Table 4.15).

![Figure 4.49: Overall neighborhood satisfaction in three districts](image)

In general, are you satisfied with the quality of life in your current neighborhood?
Table 4.15: Cross tabulation between quality of the building in neighborhood and satisfaction with the quality of life in neighborhood

<table>
<thead>
<tr>
<th>What is the quality of the buildings in your neighborhood?</th>
<th>In general, are you satisfied with the quality of life in your current neighborhood?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very satisfied</td>
<td>Somewhat satisfied</td>
</tr>
<tr>
<td>High quality</td>
<td>66.7%</td>
<td>33.3%</td>
</tr>
<tr>
<td></td>
<td>66.7%</td>
<td>5.0%</td>
</tr>
<tr>
<td></td>
<td>3.1%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Intermediate quality</td>
<td>3.0%</td>
<td>45.5%</td>
</tr>
<tr>
<td></td>
<td>33.3%</td>
<td>75.0%</td>
</tr>
<tr>
<td></td>
<td>1.6%</td>
<td>23.4%</td>
</tr>
<tr>
<td>Poor quality</td>
<td>14.3%</td>
<td>75.0%</td>
</tr>
<tr>
<td></td>
<td>20.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td></td>
<td>6.2%</td>
<td>32.8%</td>
</tr>
<tr>
<td>Total</td>
<td>4.7%</td>
<td>31.2%</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>4.7%</td>
<td>31.2%</td>
</tr>
</tbody>
</table>

4.7 Research Findings

By regarding analysis results, it is concluded that residential districts are physically deteriorated, having poor façade and structure condition, high level of housing abandonment and physical disorder of abandoned/vacant houses. Additionally, all districts have locational obsolescence due to the overall condition of Walled City. Also, by existence of contaminated sites, it is achieved that there are lack of environmental standards. Due to physical and locational obsolescence, housing demand in the districts is low. Moreover, by comparing by comparing district 3 with districts 2 and 4 from above table, district 3 is mostly suffering from physical deterioration. Overall results of physical analysis are collected in Table 4.16.
Table 4.16: Overall results of physical analysis

<table>
<thead>
<tr>
<th>Physical neighborhood satisfaction</th>
<th>Summary</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>District 2</td>
<td>District 3</td>
</tr>
<tr>
<td>Aesthetic and housing quality of houses and physical decay</td>
<td>Façade condition deterioration</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>Structure condition deterioration</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>Abandoned/vacant houses</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>Physical disorder of abandoned/vacant houses</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>Physical undesirable effect of abandoned/vacant houses on neighborhood satisfaction</td>
<td>Poor façade</td>
</tr>
<tr>
<td></td>
<td>Quality of location</td>
<td>Far from public spaces, leisure and educational units</td>
</tr>
<tr>
<td></td>
<td>Market obsolescence</td>
<td>Deteriorated façade and structure condition, lack of recreational facilities, public transportation, far from city center</td>
</tr>
<tr>
<td></td>
<td>Housing demand</td>
<td>57%: Low demand/ 43%: No demand/ 0.0% High demand</td>
</tr>
<tr>
<td></td>
<td>Contaminated sites</td>
<td>Vacant houses and lands are known as lost space as well</td>
</tr>
</tbody>
</table>

Obviously lack of these parameters, directly had affects on both residents and new comers increases unwillingness to live in these areas. Conclusively, it gives impetus to leave and move out from neighborhood, as before discussed when housing units are separated from housing market abandonment appears. In the other hand housing abandonment affects on neighborhood dissatisfaction.

According socio-economic results, it can be said that age distribution, level of education, length of habitation and home value, are obtained with moderate level in the areas. Also responders that are owner occupied are more than tenants, and level
income is low in neighborhood. In addition, residents do not find their neighborhood safety and healthy. Safety and health in housing areas are two other socio-economic factors for analyzing neighborhood satisfaction. The growth of the new houses in housing market is found as intermediate, so as before discussed, the residents who can financially afford themselves will move out from neighborhood. Also in housing market can find reasonable housing units in the housing market. Table 4.17, shows overall results of socio-economic analysis.

Eventually, low level of place attachment in young resident, negative effects of abandoned/vacant houses on safety and health of neighborhood and high level of housing growth in the market are all main parameters of housing abandonment. So it can be concluded that all these factors are affecting to socio-economic neighborhood satisfaction.

<table>
<thead>
<tr>
<th>Table 4.17: Overall results of socio-economic analysis.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Socio-economic neighborhood satisfaction</strong></td>
</tr>
<tr>
<td>Results</td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Level of education</td>
</tr>
<tr>
<td>Level of homeownership</td>
</tr>
<tr>
<td>Length of stay</td>
</tr>
<tr>
<td>Level of social cohesion</td>
</tr>
<tr>
<td>Neighborhood income level</td>
</tr>
<tr>
<td>Home value</td>
</tr>
<tr>
<td>Level safety</td>
</tr>
<tr>
<td>Level of health</td>
</tr>
<tr>
<td>Rate of new housing growth</td>
</tr>
</tbody>
</table>

108
4.8 Summary of the Chapter

Physical and socio-economic issues are main indicators housing abandonment and neighborhood satisfaction that reached from literature reviews. In this chapter physical and socio-economic condition of case study areas analyzed and tested, with the help of specific figures and tables for each parameters. Firstly with the help of physical analysis, façade and structure condition, physical disorder and undesirable effects of abandoned/vacant houses on neighborhood satisfaction of residents are analyzed. Besides, quality of location, market obsolescence, housing demand and contaminated sites were analyzed as well. Secondly, socio-economic condition of residential districts with the help of questionnaires was done. In terms of physical condition, all neighborhood districts have physical decays on residential units and high vacancy rates.

Level of place attachment, level of safety and health and new houses in housing market are aspects of socio-economic analysis. Regarding to analysis, level of income, safety and health are main socio-economic problems in the selected case districts.

In the following chapter, there are some strategies that are developed to mitigate the negative consequences of housing abandonment on neighborhood satisfaction.
Chapter 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Housing abandonment should put on the urban policy importance, and give more attention. If this problem is continuing to be ignored and unseen in residential neighborhood, consequently more and more houses is going to be abandoned in future. As aforementioned, housing abandonment has destroying impacts on overall physical condition of neighborhood, social community and economic losses. Furthermore, the most important negative impact of this phenomenon is on neighborhood satisfaction. Because satisfaction of residents from their living place, make the community more desirable and active, also encourages other people to live and move in the neighborhood.

Neighborhood concept and sense of community were, very important in the Walled City. Accordingly, existence of housing abandonment in the residential neighborhood directly decreases the community’s satisfaction in physical, social and economic dimensions. These dimensions were analyzed to achieve the level of neighborhood satisfaction, in the residential districts of Walled City. Based on the main aim, that is analyzing effects of the abandoned houses on neighborhood satisfaction in residential districts of the Walled City of Famagusta, the thesis is included five chapters.
In chapter one, a brief introduction was given about housing abandonment and neighborhood satisfaction; also problem statement and methodology of the study were introduced in this chapter.

In Chapter two, housing abandonment is discussed. Residential abandonment and its definition were given. Therefore, housing abandonment has three negative consequences, physical, social and economic, that each has sub headings. Besides, the reasons of housing abandonment discussed, these are, physical, social and economic reasons.

Chapter three was focused on neighborhood satisfaction and its indicators. Neighborhood satisfaction indicators are physical, social and economic satisfaction. At the end of the chapter three, relationship between the physical, social and economic reasons of housing abandonment, relies on the physical, social and economic indicators of neighborhood satisfaction. Accordingly a table generated to form the basis of methodology of the case study.

Chapter four presented, a brief history Walled City, the reasons of selected residential districts and measurement methods for analyzing each indicator. The finding that, reached in the end of chapter three, were tested in the case study. These indicators were defined as aesthetic and housing quality of houses and physical decay, locational obsolescence analysis, contaminated site, level of place attachment, level of safety and health and rate of new houses in housing market. Finally, chapter five is related to recommendations for improving physical and socio-economic satisfaction in the Walled City.
5.2 Recommendations for Improving Physical and Socio-economic Satisfaction in the Walled City

There are numbers of suggestions for improvement and preserving the residential part of this historic core. The term of the abandonment needs more deeply studying to understand the process. There are some effective strategies to addressing abandoned houses to improve the neighborhood satisfaction.

Accordingly, there are some recommendation to decrease physical deterioration, that are presented in below:

• *Aesthetic and housing quality of houses and physical decay:* economic issues always causing abandonment so by motivation the owners to maintain or transferring to new owners in the other hand government or municipality financially can give loan or reducing taxes, offers opportunity to keep and maintain their houses. By this method owners would be motivated and try to preserve their houses. Accordingly aesthetic quality of buildings would be improved, also attract residents to willing live and encouragement of others to move in

• *Locational obsolescence:* quality of location should be optimized by consideration new functions in each residential district such as leisure and recreational facilities, semi public spaces, educational facilities. Accordingly, market obsolescence and housing demand might improve.

• *Contaminated Sites:* As aforementioned, contaminated sites are caused by lack of environmental standards. So, there are trash and construction waited materials are
available in vacant hoses and lands. Accordingly, these vacant and land should be clean up by Municipality or related staffs, to refine the environment for hygiene of residents and environment.

By applying such strategies, it might possible to decrease physical housing abandonment indicators. Conclusively, if housing abandonment reduces, neighborhood satisfaction is spontaneously increased and improved.

Thus, there are some recommendations to improve socio-economic condition of areas, that are presented in following lines:

• **Level of place attachment:** when level of place attachment is high in a neighborhood, residents are more willing to live in. So residential districts should be balanced with age distribution, young resident may encouraged to live and stay. The importance of historical neighborhoods should be explained with residents.

• **Level of safety and health:** for receiving high level safety and health condition, the causes of safety and hazards should be removed and cleaned. In addition, abandoned/vacant buildings might clean up from trash and litters and, the building those do not have doors and windows, accordingly, should be installed to prevent enter empty places for unsafely and unhealthy activities.

• **New houses in housing market:** housing growth in housing market is in an intermediate and never stops. Accordingly, in residential districts there should be some facilities and Preference for residents that, to be attract to buy and live in. for instance, reducing taxes and loan to maintain, or even low bills.
Consequently, by such strategies housing abandonment might improved to reduce, and residents will feel more attached to their neighborhood and the level of safety and health of neighborhood will optimized and finally residents will more satisfied to live in these districts. Besides, recommendations that are given above, there are some recommendations for managing and reusing abandoned houses.

Parallel with recommendations above, the abandonment should be controlled and managed before demolition. Government can establish an institute to manage abandonment and other similar relevant issues. Through this program, the owners that are going to leave their houses instead of abounding they would sell their properties to the institute, so this organization will maintain and sell or rent them to new owners or can reuse it as another appropriate functions.

Also, by reusing abandoned houses it shows awareness of importance of houses value in historical neighborhoods. Condition and potential of the neighborhood should be analyzed because it is very important decision that may affect on physical, social and economic dimensions. The level of the reusing success is depends on community revitalization and neighborhood satisfaction.

5.3 Agenda for Future Research

This research has been done for providing the baseline information of housing abandonment and its impact on neighborhood satisfaction. For this study, only three residential district of the Walled city of Famagusta is selected. Current situation of the selected residential districts in the Walled City found as unsatisfactory due to housing abandonment and other physical and socio-economic problems. The types of abandonment such as offices, retail /shops, industrial buildings abandonment can be
used for the further research and analyzed for the whole Walled city. By completing this thesis, it is hope that it could be useful and beneficial not only for students and researchers but also could help experts in municipality for future regulations and proposals.
REFERENCES


Gee, G. C., Reischl, T. M., & Kruger, D. J. (2007). Neighborhood social conditions mediate the association between physical deterioration and mental health.


James, F., Hughes, J., Burchell, R., & Sternlieb, G. (1974). Housing Abandonment in


Community Assets.


URL, 1: http://www.anadoluyakasi.net/yasam/2011/02/09/kaderine-terkedilmis-tarihi-evler
URL, 2: http://www.flickr.com/photos/siderocks/9381499493

URL, 3: http://farm8.staticflickr.com/7007/6807973867_107f0a8783_o.jpg

URL, 4: http://static.panoramio.com/photos/large/49571142.jpg
APPENDICES
Appendix A: Questionnaire Survey Samples
Appendix A: Questionnaire Survey Samples

English Sample

1. What is your nationality?
   ○ TRNC ○ Turkish ○ TRNC-Turkish ○ Other

2. How many years have you live in this house?
   ○ 0-2 ○ 3-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ 20+

3. What is your tenure?
   ○ Owner occupied ○ Tenant

4. According to your opinion, what is the income level of your neighbors in this neighborhood?
   ○ Very good ○ Good ○ Fair ○ Poor ○ No idea

5. How often are you contact with your neighbors?
   ○ Every day ○ A few in a week ○ Occasionally ○ Very rarely ○ None

6. Are you happy to live in this neighborhood?
   ○ Yes ○ No ○ Not bad ○ No idea

7. Are you feeling safe by living in this neighborhood that there are abandoned/vacant houses?
   ○ Yes ○ No ○ Not bad ○ No idea
8. Is your neighborhood healthy by consideration of existence of abandoned/vacant houses in your neighborhood?
   ○ Yes  ○ No  ○ Not bad  ○ No idea

9. What is the quality of the buildings in your neighborhood?
   ○ High quality  ○ Intermediate quality  ○ Poor quality

10. What is the most important consideration to prefer to live in this area?
    ○ Price  ○ Location  ○ Home amenities  ○ Proximity to work, school, public transportation and to shopping  ○ Inherited  ○ Safety

11. If any, what are the negative points of your neighborhood?
    ○ Health Problem  ○ Safety problem  ○ Abandoned/vacant houses in the neighborhood  ○ None

12. What are the physical undesirable effects of abandoned/vacant houses on your district?
    ○ Trash  ○ Broken windows  ○ Open doors  ○ Poor facade  ○ Deteriorated structures  ○ None

13. In general, are you satisfied with the quality of life in your current neighborhood?
    ○ Very satisfied  ○ Somewhat satisfied  ○ Not satisfied  ○ Not sure
Turkish Sample

1. Uyruğunuz nedir?
   ○ Kıbrıslı Türk  ○ Türk  ○ Kıbrıslı Türk - Türk  ○ Diğer

2. Kaç yıldan beri bu evde oturuyorsunuz?
   ○ 0-2   ○ 3-5   ○ 6-10   ○ 11-15   ○ 16-20   ○ 20+

3. Mülkiyet durumunuz nedir?
   ○ Ev sahibi  ○ Kiracı

4. Size göre, mahallenizde yaşayanların gelir düzeyi nedir?
   ○ Çok iyi  ○ İyi  ○ Orta  ○ Kötü  ○ Fikrim yok

5. Komşularımızla hangi siklikla görüşüyorsunuz?
   ○ Her gün  ○ Haftada birkaç gün  ○ Arada bir  ○ Çok az  ○ Hiç

6. Bu çevrede yaşamaktan memnun musunuz?
   ○ Evet  ○ Hayır  ○ Fena değil  ○ Fikrim yok

7. Kendinizi terk edilmiş / boş evler Bulunduğu mahalledede yaşamak güvenli hissediyor musunuz?
   ○ Evet  ○ Hayır  ○ Fena değil  ○ Fiktrim yok
8. Çevreniz sağlıklı mı terk edilmiş / boş evlerin mahallenizde varlığı dikkate alınarak?
○ Evet ○ Hayır ○ Fena değil ○ Fikrim yok

9. Mahallenizdeki binaların kalitesini nasıl buluyorsunuz?
○ Yüksek ○ Orta ○ Kötü

10. Bu mahallede yaşamayı neden tercih ediyorsunuz? Buranın hangi özelliği sizi burada kalmaya itiyor?
○ Ev Kirasının düşük oluşu ○ Yer ○ Evin özelliği ○ Mahallenin iş, okul ve alışveriş merkezine yakın olması ○ Miras oluşu ○ Güvenli oluşu

11. Eğer varsa, mahallenizdeki problemler nedir?
○ sağlıklı problemi ○ güvenlik problemi ○ Mahallede terk edilmiş / boş evler ○ Hiç yok

12. Sizin bölge terk edilmiş / boş evlerin fiziksel istenmeyen etkileri nelerdir?
○ Çöp ○ Kırmız pencere ○ açık kapı ○ kötü cephe ○ bozulan yapıları ○ Yok

13. Genel olarak bu çevredeki yaşam koşullarından memnun musunuz?
○ Çok memnunum ○ Biraz memnunum ○ Memnun değilim ○ Emin değilim
Questionnaires for market analysis from ............ Estate vacancy:

1. What is the level of housing demand in the Walled City?
   ○ High demand ○ Intermediate demand ○ Low demand ○ None demand

2. What is the level of home value (price) in the Walled City?
   ○ High value ○ Intermediate value ○ Low value

3. What is the level of housing growth in housing market?
   ○ High ○ Intermediate ○ Low

4. What are the reasons for market obsolescence in the Walled City?
   -
   -
   -
   -
   -