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**AN ENTRY ON INFLUENTIAL FACTORS IN USER INCORPORATION OF  
HOUSING**

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**ABSTRACT**

Urban development and architecture is based on three decades of incorporation applications that has become paradigm of planning and urban design in Europe and North America. Such an approach was produced in concepts of New Urbanism, smart growth, transit based development, traditional neighborhoods and urban villages. Looking at the urban development plan that is prepared for many of cities of country, we can acknowledge that theoretical and methodological explanation of this type of urban development in the country has been weak. The same topic, with the aim of studying the approach in the field of housing and urban of the country has formed the basis of this article. For this purpose we take a brief look at their history, benefits and scale, article 45 of the incorporation components and content login and housing through content analysis were analyzed. The results showed that the position of this new approach in European and American countries have been in the spotlight and also acquired factors have a great impact on people living in urban design and housing architecture on people living in the area. Analysis of article content clearly reveals that most researchers directly and indirectly have addressed the debate on the effects of account incorporation on housing and residents which according to Articles we can deploy the necessity of using this type of system planning and urban development in the country.

**Keywords: Incorporation account, mixed-use, housing, new urbanism, composition, development.**

## **INTRODUCTION**

In recent decades, incorporation applications were introduced as a key component in the development of transportation-oriented, traditional neighborhood development, intelligent development and New Urbanism [1]. Economic and environmental concerns continue to increase attention to this issue during the 1980s. At the end of this decade, the sustainable development and smart growth movement seemed to have strategies for respond. Both movements saw incorporation application as part of the response to urban problems. Incorporation application along with compressed form concepts, neighborhood walkability, diversity, transportation, housing choices, a sense of place, community participation constitute the main instructions of smart growth [2]. Separation of the various municipal activities and therefore the separation of users and create a distinct functional zoning is one of the common methods of zoning of the industrial revolution that the negative effects of this kind of attitude to locate activities was specified during the time and raised criticism of theoreticians like Jacobs sparked so that new ideas and Urban Development has supported the incorporation applications and it is considered essential for urban

sustainability [3]. Urban hybrid approach, relying on basic urban applications, were produced among the new concepts such as New Urbanism, urban development, sustainable development, enhance the competitiveness of urban land use and smart urban growth [4] that have environmental, social, institutional benefits within its urban design and a smarter approach and favorable environment for the creation of attractive and sustainable urban environment [5]. The overall goal of user incorporation is to improve the welfare and health of urban residents. This goal can be achieved in several ways, the most important of them is bringing or combination of life and work together and the elimination of single-functional urban areas [6]. Therefore, urban development based on the combination of land use is a strategy to arrange a physical space that is needed for optimal performance of the population [7].

### **Concept and history of user incorporation**

By holding Siam congress and the Second World War, urban development in many cities in North America and Europe were significantly influenced by the principles of functionalism. In this belief, the shape and construction of the city should be in accordance with requirements in which four

main characteristics (housing, implementation of land, recreation and transportation) were significantly separated. Over the past decades, Orientation of urban planning has led to the user incorporation. In such a way that it is considered as part of the urban renaissance in Europe or the dense city in the United States as part of the New Urbanism approach [8]. Mixed-use development is a development based on a broader concept of new urbanism. The term "mixed development" is an abbreviation for the expression of any plan that does not consist solely of one user. Individual use buildings can be combined vertically. In cases where a residential project is considered, vertical composition of profile the ground floor is considered for the commercial real estate and residential section

is on top of them. Horizontal composition of users refers to adjacent buildings [9]. User incorporation development does not mean that several different functions can be combined mechanically, but a process of negotiation of the various interest groups. No model is perfect for the development of user incorporation. Only with reciprocating, top to bottom and from bottom to top activities and encourage social benefits and participation in the development process, benefits of user incorporation can be realized. Figure 1 shows user incorporation understanding of the environment as a cyclical process in which they identify and discuss significant aspects of the incorporation: Agents, players, plan, design and effects. The interaction between these areas creates a mixed-use environment [10].

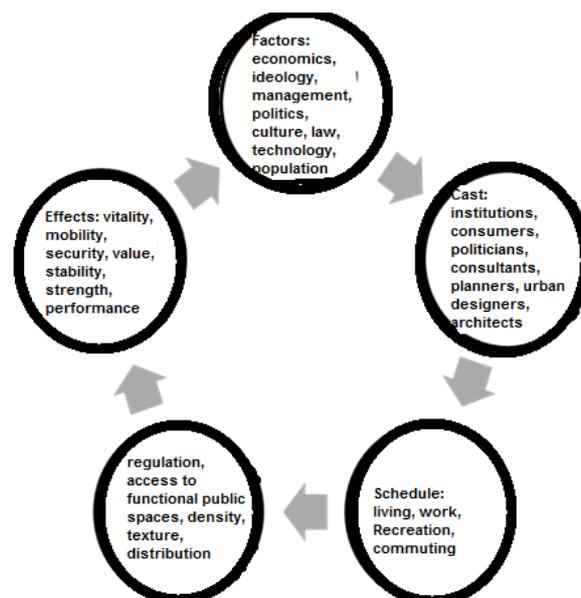


Figure 1: The actors and factors in urban development mixed usage - source [10]

**Mixed-use in residential context**

In new Urbanism use of in various applications in the areas of working and living in different levels of human communities, including the combination of shops, offices, apartments and houses on the site, mixing land uses in a neighborhood, in a block in a building and the diversity of people with different ages and income levels and diversity of culture and ethnicity is considered important. Using mixed use can result in activation of tissue, increase in security, and increase in social interactions, decrease in daily trips (between work and residence) and consequently reduction of traffic and prevention of horizontal expansion [11]. Other features of the neighborhood, there is a mixed-use components so that it has a commercial on the ground floor and housing on the upper floors. It should be noted that today this feature declines and residents to meet the needs have to go to the street in the neighborhood, this also enhances the safety and comfort of riding in the neighborhood, and the neighborhood is threatened. So due to variety of usage in places accessible to residents, it can fulfill residents need to provide their daily needs [12]. A successful combination occurs when a user uses are compatible with each other and interact with

each other in a positive way. A successful combination of applications happens when a user comes to creating a balanced society with a wide range of services without depending on the car. Buildings of various sizes can allow different applications to be well side by side. To make all social groups have a stronger presence, Public housing should not be recognized organization of private homes and land quality and location, with the same status [13].

**The advantages of incorporated usage**

The increasing use of incorporation diverse mix of housing and community usage can encourage and related commercial facilities. May the stability of society, so that for families that is in place and accelerate the growth of local and environmental diversity that with the arrival of children do not move and continue living in the same society when their children leave [14]. Usage incorporation developments provide various uses and activities within a building, encouraging the use of centers in labor days, adding dynamism and vitality to the streets. Simultaneous use of the building in the best way so that retail and business activity in the ground floor and lower levels, to help activate the street, and housing applications that require privacy and noise reduction are , located at higher levels [15]. Rogers (1998),

shows time interval travel in his model in figure 2. Part of the time was achieved by to do anything other than sitting in traffic. As a result, shorter travel distances to minimize environmental impact. Less developed roads,

so the volume of cars and parking spaces will be needed less. So by increasing the density which means more infrastructures can be shared among a greater number of users [16].

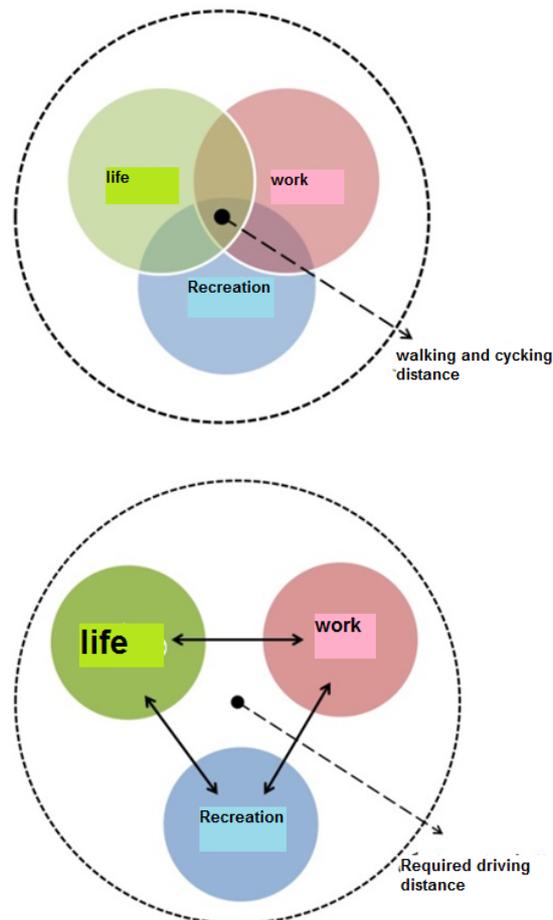


Figure 2: living, work, recreation (play) and the concept of sustainability of Rogers - source [16]

**Views of Housing and mixed usage**

Different views with regard to Housing and mixed usage urban development is indicative of the importance of this:

Will Alsop: "A city is made up of mixed usage, environmental protection and the development of green belts and areas beyond it. All this pressure creates a vibrant urban

environment will be more "[17]. Alison Timchur: "The real estate, developers and representatives had praised the developments as a way to the future for developing urban mixed usage for Australia." [18]. Alen Rolly: "The criticism of single-use zoning, are not new, but the concern for environmental sustainability and urban design quality,

creates new impetus for the integration of land use” [19]. Chris Marsh: "The development of user mixed certainly cannot be considered as cure, but its impact on the continued improvement of towns and the city should not be underestimated." [20]. Large mixed-use goal that is expressed in the New Urbanism, Promoting a vibrant and diverse community, a range of housing types, different applications and different density materials (4 to 6 floors). Different types of housing different forms of houses, row houses, old and new apartments, single-family and multi-family that are poor and the rich cannot find a place to live [21].

**RESEARCH METHODOLOGY**

According to the records and review of the literature in the field of housing factors that could affect results, isolation and the study of articles published by researchers in this field to review the content they paid in Table 1. To track approach and the effects of mixed

urban land in the area of housing, collection of scientific articles in the field of architecture, design and urban planning of development have been visited. Therefore, scientific and research journals were searched up among the articles selected for this study. Then, in order to limit the search, key word and a concept that, in theory, on paper were identified related up the required papers based on them, are selected. among the research that has been done on mixed usage and housing a total of 45 articles were selected, Since the scope of this study, on the development of urban land is allocated to the mixed, therefore, the procedure in this article is based on descriptive research - based content analysis. In this way the components and materials selected articles, are classified and analyzed the content of the concepts of this approach, be systematic and be determined.

Table 1: achieved Factors by emphasis on mixed usage effects of housing.

row	Factor from history	Researcher
1	Dynamism and vitality	[17] Will Alsop 2008 [22] Michael Gentin 2009 [23] Christine Rombouts 2006 [24] James M. Daisa2004 [25] Valley Connections 2001 [4] Eric Hoppenbrouwer 2005 [26] Andy Coupland 1997
2	Walking based	[27] Ursula Lehner-Lierz1997 [24] James M. Daisa2004 [28] James R. Delisle. et al 2011 [29] Sivam, A. &Karuppanan, S. 2009 [30] Khattak, A.J.& Rodriguez, D. 2005 [31] Robert Cervero 1996 [10] Joost W. Van den Hoek 2008
3	Proximity of activities	[32] Mineta Transportation Insititue 2001 [33] Hildebrand Frey 1999 [34] Yang Jiang 2010 [35] Anne-Françoise Mariqu 2011

		[36] Petter Naess 2003 [37] Yosef Rafeq Jabareen 2011 [38] Sonia Hirt 2007 [25] Valley Connections 2001
4	Security	[22] Michael Gentin 2009 [39] Peter Jones. et al 2007 [26] Andy Coupland 1997 [40] Jill Grant 2002 [41] MacDonald John. et al 2013 [4] Eric Hoppenbrouwer 2005
5	Strengthening health	[42] HSP 2009 [22] Michael Gentin 2009 [43] Matthew Moore 2009 [44] Howard Frumkin 2002 [45] Sarah Graham 2005 [46] Marya Morris 2006 [47] Dena Belzer and Gerald Autler 2002 [48] Hugh Barton. et al 2003
6	Preserving open space and dynamic	[49] Arrington, G. B 2002 [50] SDS 2002 [51] J. Barry Barker 2004 [52] Bryan Woolley 2012 [4] Eric Hoppenbrouwer 2005 [26] Andy Coupland 1997
7	Diversity	[53] Dittmar and poticha 2004 [54] Micheal Bernick 1997 [55] Linda M. Wheaton 2009 [56] Faeze Mehri 2012
8	Reducing dependence on the private car	[34] Yang Jiang 2010 [57] Yosef Rafeq Jabareen 2006 [58] CANPZD 2006 [59] Philippe Barla, et al 2011 [60] Ayes Ozbil 2009 [61] Colin Vance, Ralf Hedel 2007 [29] Asad J. Khattak, Daniel Rodriguez 2005 [62] Stephen. M. Wheeler 2002 [63] Larsen Kristin 2006 [4] Eric Hoppenbrouwer 2005 [26] Andy Coupland 1997 [64] P. Christopher Zegras 2004

Source: research findings

**Data analysis**

In order to better identify the risk factors in the development of applications based on a combination of housing, components and chosen articles, By issues such as the tendency of articles, recipes factors obtained based on semantic relationship with usage and the mixed papers, case was categories. In Tables 2 to 4, quantitative analysis of each of them has been mentioned.

As can be seen in Table 2 and 3 of the 45 articles selected topics of transportation,

planning and urban design and public health with the highest percentage of mixed applications are studied, in case period of the research 7 and 14 years old. However, the issues of security, land use and public spaces have more time to them. So it can be said that the city and the city of mixed applications is an important issue, But because of the people living in housing environments research has been done on the social environment.

According to Table 4 obtained factors based on semantic affinity with mixed use were

rated and examined, it can be seen that the 45 articles, 58 research on the topic has been chosen in the sub indirectly between the factors just the same and general remarks on the results of the best ones. Researchers in

their papers apart from your data analysis and factors, factors and other research scientists have also taken into consideration and this issue is to increase the number of research.

**Table 2: Categories based on the orientation of articles**

Percentage	Number of Articles	Thematic Classification of Articles
17.7	8	Planning and urban design
17.7	8	Public health
28.9	13	Transportation
13.5	6	Security and crime
11.1	5	Land use
11.1	5	Public spaces
100	45	Total

Source: author

**Table 3: thematic categories based on years of publication**

Time range	Number of Articles	Thematic Classification of Articles
a period of 14 years ,1997-2011	8	Planning and urban design
a period of 7 years ,2002-2009	8	Public health
a period of 14 years ,1997-2011	13	Transportation
a period of 16 years 1997-2013	6	Security and crime
a period of 15 years ,1997-2012	5	Land use
a period of 15 years ,1997-2012	5	Public spaces
A 16-year period	45	Total

Source: author

**Table 4: Categories factors obtained based on semantic relationships with mix Usage**

Percentage	Number of research	Factors	Rank
20.8	12	Reducing dependence on the private car	1
13.8	8	Closeness of activities	2
13.8	8	Strengthening health	3
12	7	Walking based	4
12	7	Dynamism and vitality	5
10.3	6	Security	6
10.3	6	Preserving open and dynamic space	7
7	4	Diversity	8
100	58	-	Total

Source: author

**CONCLUSION**

In urban planning and architecture of the world, the development of public transportation and pedestrian-oriented systems and improve the physical health of people in urban development is an accepted

principle in order to reduce environmental pollution and traffic problems caused by it and create a vibrant dynamic and friendly residential neighborhoods in city.

According to the study, the researchers in their research on issues such as quality of

life, air quality and pollution, public transportation systems, roads etc., which have a direct impact on the key factors to consider, in the meantime is effective on those living in mixed-use environments. According to the developed countries in the ranking also factors in housing and mixed-use, reduce dependence on the private car because of nearby activities in complex environments have the greatest impact, the issue of pedestrian-oriented and strengthen health as a result of walking and cycling in the environment is associated. According to the rating of these factors can be said that all effects can be chained together, and each factor influences before and after operation. So despite the incorporation of the housing can create member of the scope setting active, dynamic and safe for residents.

## REFERENCES

- [1] Song, Y., Gerrit-Jan Knaap (2004). "Measuring the effects of mixed land uses on housing values", *Regional Science and Urban Economics*, Vol. 34, No. 6.
- [2] Kong, Hui, et al. (2015) Paths to mixed-use development: A case study of Southern Changping in Beijing, China. *Journal of Cities*.(44), 94-103.
- [3] Rabianski J. and Sherwood Clements J, (2007), *Mixed-Use Development: A Review of Professional Literature*. Prepared for and Funded by The National Association of Industrial and Office Properties Research Foundation. Department of Real Estate Georgia State University Atlanta, GA.
- [4] Hoppenbrouwer, E. and LOUW, E, (2005), *Mixed-use Development: Theory and Practice in Amsterdam's Eastern Docklands*. *European Planning Studies* Vol. (13, No. 7): 967-983.
- [5] Witherspoon, E., Abbett, J. & Gladstone M., (1976), *Mixed-Use Developments: New Ways of Land Use*. Urban Land Institute. Washington, D.C. Technical Bulletin, Special issue Vol. 71.
- [6] Downs, A. (2005), *Smart Growth*. *Journal of the American Planning Association*. 71(4):367-380.
- [7] Vahidi, Goldis 2009, *Administrative solutions mixing applications*. *Shhrngar magazine*, No. 48, pp. 28-23
- [8] Stead, D. and Hoppenbrouwer, E. C. ,(2004), *Promoting and urban renaissance in England and the Netherlands*. *Cities* 21(2): 119-136.
- [9] Biddulph, Mike. (2007). *Introduction to Residential Layout*. Architectural Press.
- [10] Van Den Hoek, Joost W. (2008), *The MXI ( Mixed use index) as Tool for*

- Urban Planning and Analysis, Corporation and Cities, Paper 3, P:5.
- [11] Asgharzade yazdi, sara, 2012, the proposed principles of new urbanism in planning urban neighborhoods, journal of housing and rural environment, no 130m pp 50-63
- [12] Latifi, gholamreza, neda 2012, recreating the sense of community in iran, Islamic principles of new urbanism, journal of social sciences, no 66 pp58-66
- [13] Department of environment, transport and the commission for architecture and great Britain 2009, designed to help improve the quality of the environment, translation group research and s. sharmand and solmaz hossainian, Honar Publications
- [14] Ward Thompson, Catharine. et al. (2014), Innovative Approaches to Researching Landscape and Health, Open Space: People Space 2, Routledge .
- [15] Ku-ring-gai Council, (2013), Local Centers Development Control Plan, Volume A, Australia.
- [16] Wardner, Pamela. (2014). Explaining mixed-use Developments: A Critical Realist's Perspective, 20<sup>TH</sup> ANNUAL PACIFIC-RIM REAL ESTATE SOCIETY CONFERENCE.
- [17] Alsop, W. (2008), High and Mighty: Prince Charles may view skyscrapers with disdain but they are revitalising our urban landscapes, The Guardian, London. <http://www.guardian.co.uk/commentisfree/2008/feb/02/design.architecture>.
- [18] McDonald, C, (2008), Destination: Mixed Use Development, Property Australia, Property Australia Sydney, <http://www.propertyoz.com.au/Article/NewsDetail.aspx?p=56&mid=530>.
- [19] Rowley, A. (1996b). Mixed-use development: Ambiguous concept, simplistic analysis and wishful thinking, Planning Practice and Research, Vol.11, No.1.
- [20] Marsh, C, (1996), Mixed Use - a mixed blessing?, University of Westminster, Westminster.
- [21] HSP- Healthy Space & Places, (2009), Design Principle Mixed Land Use, Australian Government Department of Health and Ageing. <http://www.lifesciencesite.com>. 273.
- [22] Gentin, M. (2009) All Mixed Up, A critical Analysis of mixed Use Sydney.
- [23] Rombouts, C. (2006) The challenges of mixed use: the right approach to mixed-use development can indeed create added value, even beyond the project itself. Urban land 65, 50-7.
- [24] Daisa, J. M. (2004). Traffic, Parking, and Transit- Oriented Development, The

- NewTransit Town; Best Practices In Transit-Oriented Development, Washington, Covelo & London: Island Press.
- [25] Valley Connections. (2001). Model Transit-Oriented District Overlay Zoning Ordinance, Prepared for Valley Connections, Valley, Community Design and Architecture, Inc, Ch , pp 7-8.
- [26] Coupland, A. (1997) Reclaiming the city : mixed use development. E & FN Spon, London. Dieleman, F. and M. Wegener (2004) Compact City and Urban Sprawl. Built Environment 30, 308.
- [27] Lehner-Lierz, U. (1997), the role of cycling for women. In: R. Tolley, Editor, The Greening of Urban Transport: Planning for Walking and Cycling. Elsevier.
- [28] James R. Delisle. et al. (2011), An Empirical Study of the Efficacy of Mixed-Use Development: The Seattle Experience, ARES Conference, Vienna, Austria.
- [29] Sivam, A. & Karuppanan, S.(2009). Density Design and Sustainable Residential Development. Institute for Sustainable Systems and Technologies (ISST).
- [30] Khattak, A.J.& Rodriguez, D. (2005). Travel behavior in neo-traditional neighborhood developments: A case study in USA. Transportation Research Part A 39 .pp 481–500.
- [31] Cervero, R. (1996). Mixed land-use and commuting: evidence from the american housing survey. Transportation Research Part A 30 (5).pp 361–377.