

# 27TH ANNUAL CONFERENCE OF THE EUROPEAN REAL ESTATE SOCIETY



## ECONOMIC ASPECTS OF HOUSING INVESTMENTS AND THE REQUIREMENT OF RATIONAL MANAGEMENT STRATEGIES FOR MASS HOUSING FACILITIES IN ANKARA PROVINCE OF TURKEY

**Esra KESKİN – Yeşim TANRIVERMİŞ- Harun TANRIVERMİŞ**

Department of Real Estate Development and Management,  
Faculty of Applied Sciences, Ankara University, Turkey



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## CONTEXT

- Introduction
- A quick literature review & current situation of housing economics and management in Turkey
- Legal dimensions about urban transformation and condominium buildings
- Research results and discussion
- Conclusions and recommendations.



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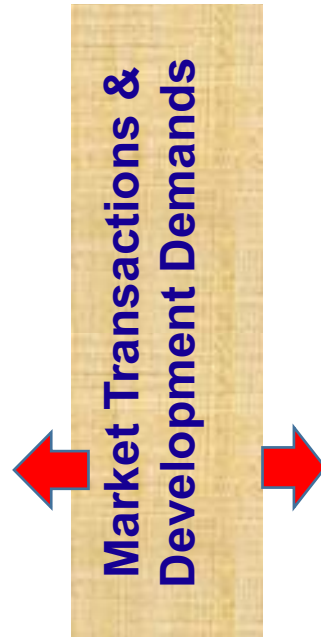
# Housing Economics and Management

- ❑ There are intensive research results related to housing economics, policy, mortgage and other aspects (such as Sullivan- Gibb 2008, Immergluck 2015, Zhu-Betzinger and Sebastian 2017).
- ❑ Limited number of researches in housing management (such as Kemp 1995, Franklin- Clapham 1997, Franklin 1998, Mills- Clarke 2007).
- ❑ Housing management is a broad term and is not well delineated in literature (Boelhouwer 1999, Nieboer 2012).
- ❑ Private sector and social housing management comprises the following activities (Priemus et al., 1999; Norris 2012):
  - **Technical responsibilities:** such as the acquisition of urban plots for housing, project development, the construction of new dwellings, and the maintenance and renovation of existing ones.
  - **Social responsibilities:** including the allocation of dwellings, consultation with tenants related to improving housing management, combating antisocial behaviour on properties, and the provision of social supports for tenants, if required.
  - **Financial responsibilities:** including accessing the financial requirements housing management tasks, from the public and private sector, and tenants' rents, and setting and collecting these rents.



# Real Estate Markets in Turkey

## Turkish Real Estate Markets:



- Real Estate Supply:
- Total No of Parcel: 58.117.962
- Total No of Housing: 21.514.338 (TKGM)
- Total No of Housing: 26.514.338 (TURKSTAT)
- Total No of Owners: 51.132.333
- Total No of Foreigners Owners: 379.441

- Real Estate Demand:
- Total No of Population: 83.614.362
- Total No of Household: 24.001.940
- Average Household Size: 3,35 people
- The Share of Single Person Household: 16.90%

This slide shows the current situation in Turkey with the data of the General Directorate of Land Registry and Cadastre and the TURKSTAT. The population and the demand for housing increases.



## Total Housing Stocks and Risks

- The total housing stock were 25 million, 65.22% of which were built in 2000 and before, it should be noted that 92% of the country's surface area is at earthquake risk.
- In the last 10 years, the average number of housing renewed annually was 670,000 and the renewal rate was 3.2%.

### Housing Stocks and Renewal in Turkey

Years	Total Number of Houses	Number of Houses Produced	Change in Number of Houses ratio(%)
2000	16.235.830	245.155	1,53
2005	17.213.842	249.816	1,47
2010	18.912.798	429.755	2,33
2015	21.952.300	724.331	3,42
2016	22.676.631	754.174	3,43
2017	22.870.667	823.952	3,63
2018	23.741.168	870.501	3,80
2019	24.471.753	730.585	3,10
<b>2020</b>	<b>24.893.893</b>	<b>422.140</b>	<b>1,73</b>



# Macro Status and Change

## Declining in new investments and decline in new real estate construction

Building license			
Years	Number of building	Number of flat and units	Number of houses
2010	139.616	907.451	902.634
2011	101.900	650.127	647.693
2012	107.816	771.878	767.426
2013	121.754	839.630	836.138
2014	139.541	1.031.754	1.027.303
2015	125.741	897.230	893.427
2016	134.099	1.006.650	1.002.725
2017	161.921	1.405.447	1.397.758
<b>2018</b>	<b>104.143</b>	<b>663.200</b>	<b>659.986</b>
<b>2019</b>	<b>56.308</b>	<b>324.839</b>	<b>304.544</b>
<b>2020</b>	<b>95.408</b>	<b>547.211</b>	<b>528.791</b>

Building permit and use			
Years	Number of buildings	Number of flats and units	Number of houses
2010	82.131	429.755	428.045
2011	98.339	556.769	554.459
2012	95.763	556.331	554.251
2013	120.933	726.339	723.540
2014	124.510	777.596	775.007
2015	110.204	732.948	730.012
2016	111.383	754.174	750.743
2017	118.802	833.517	830.294
<b>2018</b>	<b>127.044</b>	<b>893.544</b>	<b>889.982</b>
<b>2019</b>	<b>94.067</b>	<b>740.470</b>	<b>730.585</b>
<b>2020</b>	<b>77.679</b>	<b>599.889</b>	<b>594.689</b>

- Construction license declined by 46% in 2019 compared to the previous period
- Because of increase of building costs we see decline in housing project development and as a result of decline of licences there is lag of supply



## Macro Status and Change

- **Increase in housing sales:** 1.1 to 1.4 million annual sales
- Housing ownership rate of households is 56% and horizontal mobility
- Decreasing of mortgages acquisition due to an increase in loan rates - significant impact of interest rate reduction

### Number of Housing sales and acquisition methods in Turkey

Years	Mortgage sales	Sales without Mortgage	Total	Share of Mortgage sales (%)
2013	460.112	697.078	1.157.190	39,76
2014	389.689	775.692	1.165.381	33,44
2015	434.388	854.932	1.289.320	33,69
2016	449.508	891.945	1.341.453	33,51
2017	473.099	936.215	1.409.314	33,57
2018	276.820	1.098.578	1.375.398	20,13
2019	332.508	1.016.221	1.348.729	24,65
2020	573.337	835.979	1.409.316	40,68



# Macro Status and Change

- **Key factors affecting the tendency of buying housing:** housing sales prices, household income, mortgage interest and housing accessibility (Öztürk et al 2019).
- Falling of loan interest rates after July 2019, deed fee reduction and the impact of other programs.

Years	Mortgage interest rate (TL, %)											
	Jan	Feb	March	Apr	May	June	July	August	Sept	Oct	Nov	Dec
2013	9,81	9,58	9,31	9,06	8,77	8,3	8,91	9,78	10,73	10,93	10,62	10,61
2014	11,3	13,03	13,51	13,52	12,94	12,29	11,46	11,06	10,91	10,75	10,91	11,01
2015	11,01	10,8	10,82	10,97	11,49	11,87	12,28	12,59	13,57	14,3	14,13	14,01
2016	14,27	14,45	14,45	14,33	13,96	13,84	13,67	12,86	12,09	12,12	11,69	11,42
2017	11,45	11,38	11,06	11,28	11,55	11,72	12,02	12,49	12,87	13,05	13,12	13,52
2018	14,14	14,68	14,79	14,83	13,88	13,1	16,86	18,99	25,18	28,95	28,63	28,82
2019	26,22	22,98	18,16	17,7	20,45	21,81	21,06	<b>14,15</b>	<b>12,98</b>	<b>13,12</b>	<b>12,96</b>	<b>12,69</b>
2020	<b>11,88</b>	<b>11,43</b>	<b>11,40</b>	<b>11,74</b>	<b>11,23</b>	<b>9,30</b>	<b>9,11</b>	<b>11,09</b>	<b>14,16</b>	15,07	15,68	18,19

Validity start date

1.01.2011

27.09.2016

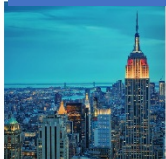
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Loan/Value ratio (%)

75

80

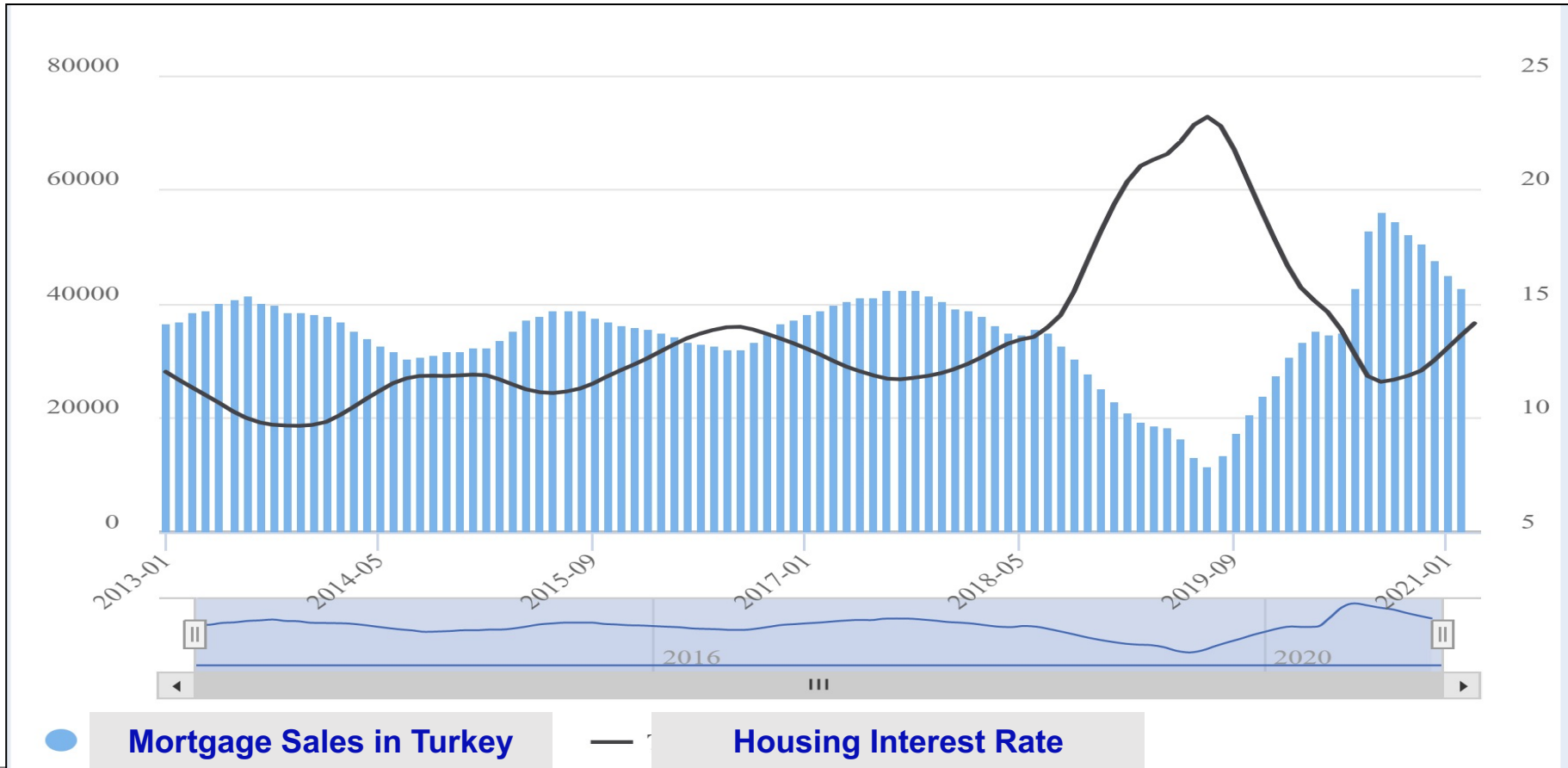
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# Mortgage Sales Comparison With Housing Interest Rate

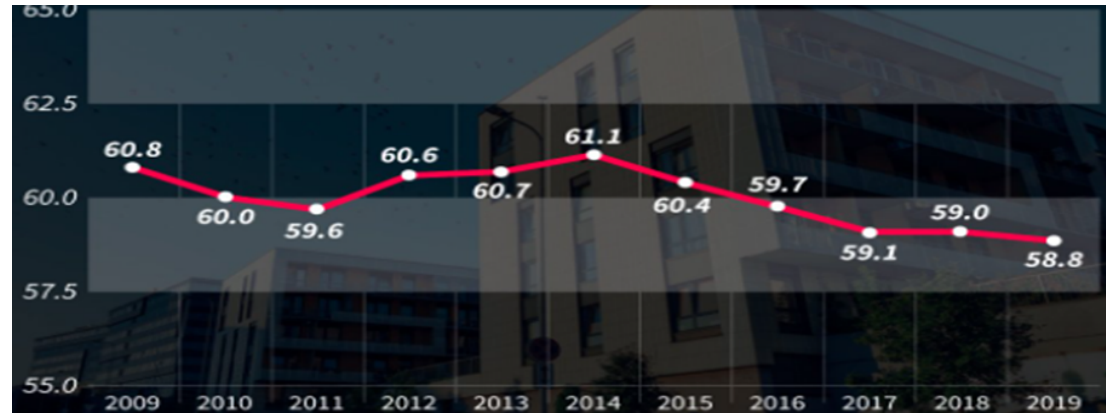
Mortgage sales decline as housing interest rates increase.



## Total Housing Stocks and Ownership

- ❑ The share of investments in housing within total fixed capital investments in last two decades varies between 18.4% and 29.8%, and the average share of housing investments in total fixed capital investments has been determined as 24.4%.
- ❑ The share of the public sector in housing investments is 0.8%, and the share of REITs, construction and real estate companies and traditional enterprises is 99.2%.
- ❑ In the total construction license and occupancy documents, 70% to 80% of the building constructions consist of residential constructions.

❑ The figure shows that **household ownership** rate is 60.8% in 2009 and 58.8% in 2019. There is a decrease as seen through the last years.



# Housing Prices, Costs And Profitability

❑ Housing prices and construction cost comparisons: Decreasing the profitability during financial instability years.

❑ The macro indicators can be used for the current analysis:

- Residential Property Price Index (RPPI): New and Second Hand House Prices - Central Bank of The Turkish Republic (CBRT)
- Residential Property Price Index for New Dwellings (NRPPI) - CBRT
- Residential Property Price Index for Existing Dwellings (ERPPI) - CBRT
- Construction Cost Indices (CCI): TURKSAT
- Domestic Producers Price Indices (DPPI) and Consumer Prices Indices (CPI) – TURKSTAT
- Real Rent TURKSTAT Rental Indices – Rent/Value



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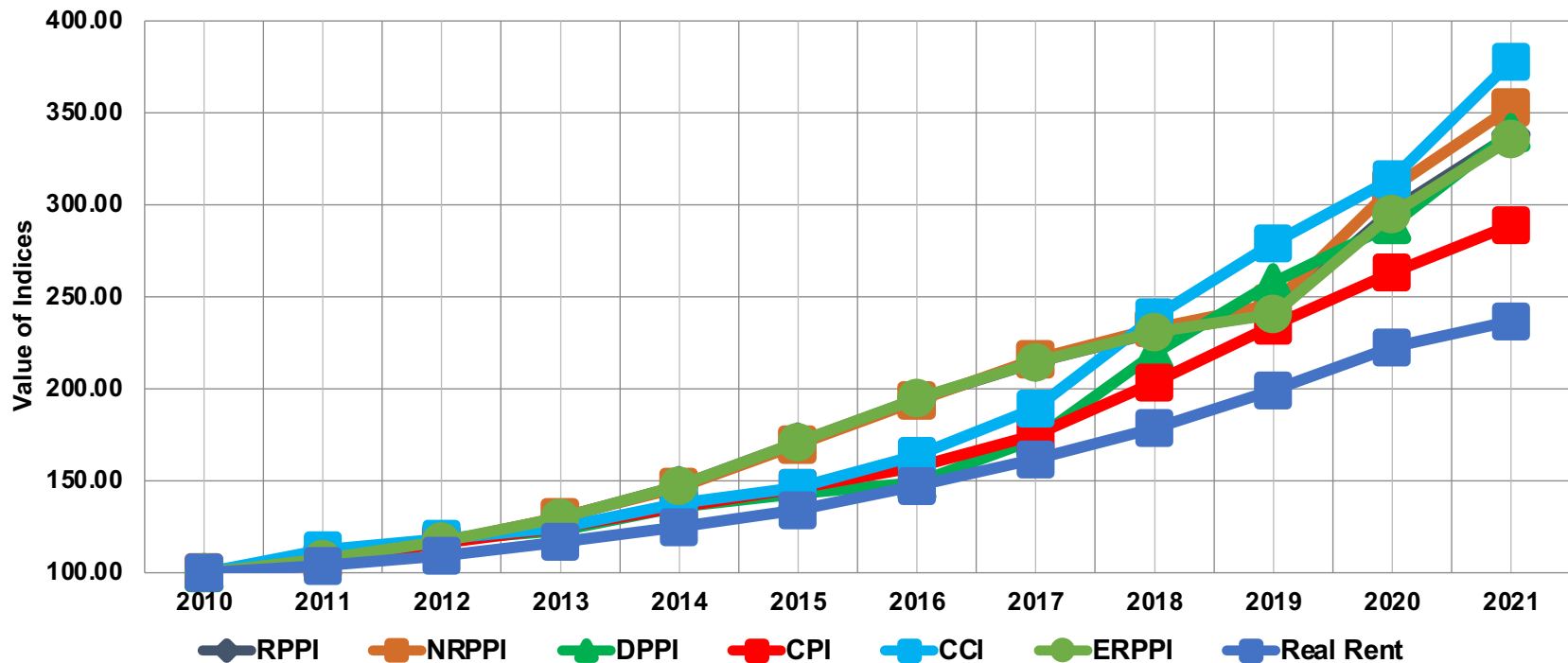
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# Housing Prices, Costs And Profitability

Length of the development process: 3-10 years and decreasing profitability

- ❑ Developers fees and investors profits are high?
- ❑ Increasing construction cost affect housing investment returns and thus new project development was decreased.



## Total Housing Stocks and Risks

- ❑ **Share of risk structures in total housing stocks?**
- ❑ In the literature and different studies conducted by academicians, researchers and other institutions, the risky structures varies between 6.5 millions and 9.5 millions (MoEU, 2021).
- ❑ According to the Ministry of Environment and Urbanisation, convention (renewal) of total number of 6.7 million of independent units were done within 20 years (MoEU, 2021)
- ❑ The necessity of transforming 35,000 independent housing units in risky and hazardous areas were prioritized in the Urban Transformation Strategic Plan, 5000 in historical city centers and 10,000 in industrial areas (MoEU 2021)
- ❑ **The housing stock in risk areas:**
  - **215,866 (49%) of 443,636 buildings and 715,122 (55%) are risky structures.**
  - 226 reserve building areas (49.319,99 ha).



# Total Housing Stocks and Risks

- ❑ **Risky and shanty housing transformation:** The transformation of single unit into the multi-storey constructed buildings – horizontal vs vertical construction?
- ❑ Who will be the beneficiary of which independent department-rights ownership-goodwill practice and its effects.
- ❑ Adaptation problems in the new settlement areas after transformation.
  - Why elevators does not work?
  - Why the heating system is not working ?
  - Why parks and social areas are not utilised?



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# Legal Arrangements About Urban Transformation

- **There are 3 different laws regarding urban transformation in Turkey:**
- Decisions on urban transformation took place with the concept of risky area in the Law No. 5366 on the Renewal, Protection and Use of Worn Historical and Cultural Properties, which was enacted in 2005.
- With the Municipal Law No. 5393 enacted in 2005, municipalities were authorized to implement urban transformation and development projects.
- With the Law No. 6306 enacted in 2012, it was aimed to transform the areas under disaster risk. The authority has been given to the Ministry of Environment and Urbanization.
- **Also in 2004, the North Ankara Entrance Urban Transformation Project Law No. 5104 inured regarding to our research area.**



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## Implementations in Slum Transformation Areas

❑ Slum transformation projects can be implemented in two different ways:

➡ construction of new residences in different areas for right holders,

➡ providing rental assistance or showing a temporary residence address to right holders living in the transformation area.

❑ In these methods, tenants are provided with the opportunity to obtain long-term and affordable housing in order to prevent tenants from being victimized.



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## Before Urban Transformation



- ❑ Approximately 32.000 people lived in illegal structures that were formed from before 1980 until 2005.
- ❑ Before the project, on an area of 1583 hectares:
  - 6921 slums within the borders of Altındağ Municipality,
  - 2521 slums within the borders of Keçiören Municipality.
  - Inadequate infrastructure and urban services & poor life quality



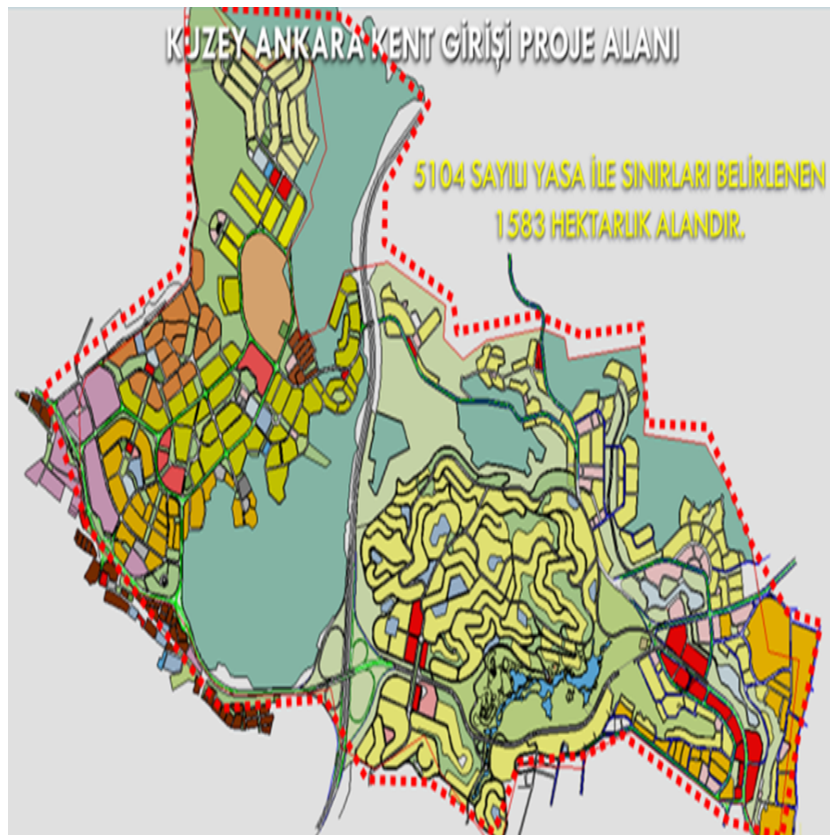
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# North Ankara Urban Transformation Project Area



<u>Shareholders</u>	<u>Area (m2)</u>
Ankara <u>Metropolitan Municipality</u>	1.358.600
<u>Citizens</u>	2.095.000
Out of <u>Registration</u>	146.400
Total Project <u>Area</u>	3.600.000



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## North Ankara Urban Transformation Project Area

### □ Structures planned in the Northern Ankara Project and cost situation:

Priority Project Area Size : 3.600.000 m<sup>2</sup>

Number of Right Holder Housing : 6,760

Total Number of Houses : 18,000 Units

Private Recreation Area : 470,000 m<sup>2</sup>

Pond Area : 180.000 m<sup>2</sup>

Hotel and Congress Center : 2 Piece

Road + Tunnel + Viaduct Length : 3 Km

Project Area Population : 70.000 People

Project Total Cost = \$1.5 Billion



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## North Ankara Urban Transformation Project Area

- The North Ankara Entrance Urban Transformation Project differs from other transformation projects as it is regulated by a special law.
- Another distinctive feature is that it was realized in cooperation with Ankara Metropolitan Municipality, Housing Development Administration (TOKİ) and TOBAŞ as project management co.
- The North Ankara Entrance Urban Transformation Project is accepted as Turkey's largest urban transformation project in terms of size and scope.



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## North Ankara Urban Transformation Project

- Altındağ and Keçiören also took part as district municipalities in the transformation project carried out under the management of the Housing Development Administration (TOKİ) and Ankara Metropolitan Municipality.
- All zoning plans, subdivision plans, permits and authorizations related to zoning applications, project approval, building permit, building inspection during the construction process and building occupancy permit in the transformation area have been left to the Ankara Metropolitan Municipality in the area within the boundaries of the Northern Ankara Entrance Urban Transformation Project.



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## Expropriation Process

- In this context, it is envisaged that the lands that are needed for the project, except for the properties that are only used in a public service, will be transferred to the Metropolitan Municipality free of charge.
- It is aimed to use the real estates owned by real persons and private law legal entities within the framework of Law No. 2981, and the real estates belonging to the right holders for the project in line with the agreements to be made.
- If an agreement cannot be reached, it has been decided that the relevant real estates will be expropriated by the Metropolitan Municipality.



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## Expropriation Process

- In this area, two basic residential areas have been established, first houses to be given to the right holders and other houses that provide financing for the expenses.



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## Expropriation Process

- Due to the surplus in the number of flats to be given to the right holders, there was a need for intensive construction. **For the number of flats on the floors has been increased and the houses have been built as high-rise.** Coloring and lighting methods were used in order to minimize the negative effects of dense construction.



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# Housing and Social Facilities Constructed for Rights Holders

- Stage 1 : 710 flats + 1 school (24 classrooms)
- Stage 2 : 754 flats + 1 kindergarden
- Stage 3 : 530 flats
- Stage 4 : 490 flats + 1 school (32 classrooms) + 2 trade centers
- Stage 5: 688 flats
- Stage 6 : 591 flats + 1 school (32 classrooms) + 1 trade center
- Stage 7 : 186 flats + 1 trade center
- Stage 8 : 477 flats + 1 kindergarden + 1 health center + 1 trade center
- Stage 9: 587 flats + 1 school (24 classrooms)
- Stage 10: 824 flats + 1 mosque + 2 trade centers



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## Housing and Social Facilities in the Financing Area;

- It was decided to build 341 flats in the 1st tender and 584 flats in the 2nd tender + 3 schools (with 32 classrooms) + 1 mosque + 1 business center.
- For the New Esenboğa Road opened in the region; total road route: 3km
- Number of bridge : 1
- Number of underpasses : 2
- Number of viaducts: 2 (240 meters and 120 meters long)
- The number of tunnels is designed as 1 (250 meters long).



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## North Ankara Recreation Area

- 650 thousand m<sup>2</sup> total area, 3 entrance gates, 9 tea gardens, 24 fast food, 10 restaurants, 10 cafes, 1 sports center, 1 youth center, 1 ladies' club, 1 elderly center, 1 wedding hall, 1 wedding hall, 1 reception hall, 1 guesthouse, 1 amphitheater and 8 public toilets.



# Before and after urban transformation

- Mega transformation project: The characteristics of project development, design, project and construction management and facility management is different from other transformation projects.
- Creation new built environment for whole citizens in Ankara.



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# Management within the Framework of the Property Ownership Act

- Condominium buildings have been added to the Property Ownership Act with the Law No. 5711 and it is aimed to be effective in solving the problems encountered in practice.

Governing bodies in condominium buildings:

- block condominium building owners board,
- building block condominium building owners board,
- building block council of representatives,
- condominium building owners board,
- condominium building representatives board.



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# Management within the Framework of the Property Ownership Act



- ❑ In condominium buildings:
  - block manager,
  - manager selected for non-block structures
  - condominium building manager
- ❑ As they can be selected from the floor owners, there is no obstacle for them to be selected from the outside. But, of course, they must have the capacity to act.
- ❑ The manager can be a natural person or a legal person.



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## Discussion of Project Area Survey Results

- In the field study, the results of **in-depth interviews, surveys and observations made with the residents of the flats and workplaces** in the North Ankara Urban Transformation Project area within the borders of Keçiören and Altındağ Districts of Ankara Province were evaluated.



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## Discussion of Project Area Survey Results

- ➔ In the research area of the North Ankara Urban Transformation Project, there are a total of 8.230 independent sections (properties) of which 8.152 are residential and 78 are commercial, in 182 blocks.
- ➔ Within the scope of the study, interviews were conducted with 364 flat owners and 30 commercial areas.
- ➔ Due to the fact that many commercial areas were closed because of the pandemic, interviews could not be held with all the anticipated commercial area owners.



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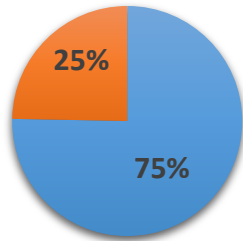


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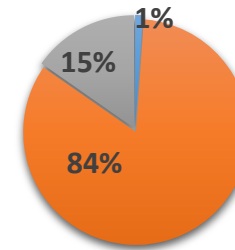
# Discussion of Project Area Survey Results

## Ownership Status



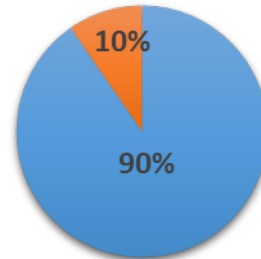
■ Householder ■ Tenant

## Dwelling Types



■ 2+1 ■ 3+1 ■ 4+1

## Occupancy Rate for Housing

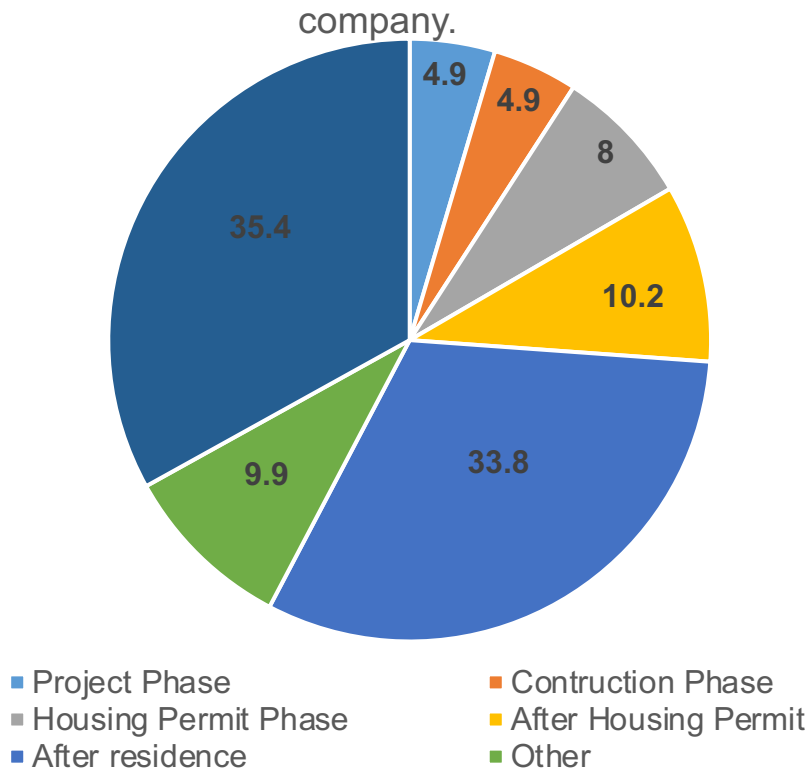


■ Occupancy ■ Vacancy

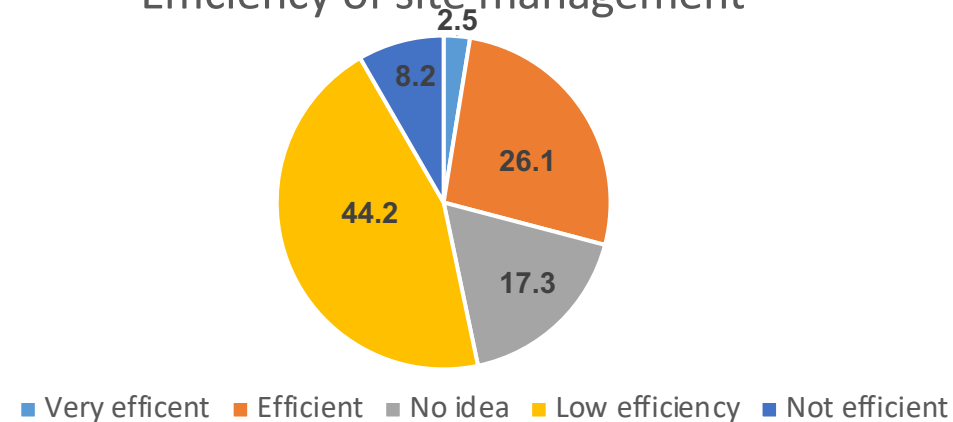


# Discussion of Project Area Survey Results

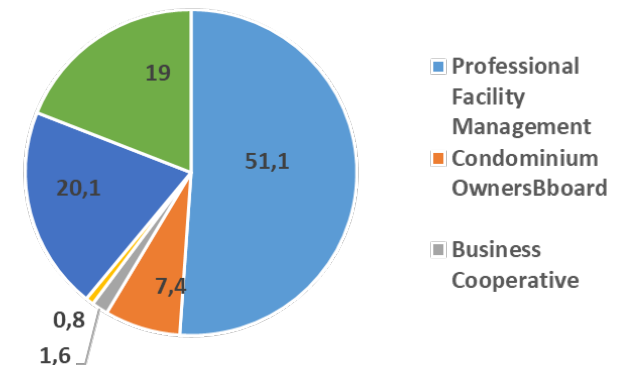
If the management is carried out by purchasing services from the facility management company, the time to start working with the facility management company.



## Efficiency of site management



## Site Management



## Discussion of Project Area Survey Results

- Building stocks managed by the FM Co. Some services given by the FM Co teams and some services outsourced by the FM Co.
- The role of FM Co in Turkish housing market is very limited.

Services	Facility Management (%)	Outsourced (%)
Cleaning	100	0
Safety	89,9	10,1
Garden and landscape	96,9	3,1
Reception	84,4	15,6
Pool maintenance and management	85,9	14,1
Consultancy (Law- Accounting)	86,8	13,2
Renting	83,1	16,9
Residential repair works	93,9	6,1
Elevator services	93,9	6,1



# Building Management Cost and Users Satisfaction

- There is a huge increase in property values after transformation
- The slum owners who used to live in the project area; household expenditures and cultural differences caused them to sell their houses or move to another area for rent, as they constituted the lower income group. **Is it defined gentrification in real term?**
- It is determined that the average value of a new house is 973 \$/m<sup>2</sup> and the value of rent is 2.0 \$/m<sup>2</sup>. Gross rent multipliers is 167 months or 14 year – **housing investment is more profitable than the other new construction area in Ankara province.**
- The share of management fee payment in rental value of house varies between 13.33% and 26.36% - average is 16.76%
- **The 64.3% of owners and user defined the management fee is high and the remaining part defined is normal.**



## Conclusions

- There are 6.7 million residences that need to be transformed as a priority and 1.5 million of this consists of residences that need to be transformed urgently in Turkey.
- Development and design of the transformation projects should take into account real estate project development, sustainability, facility and property management issues.
- After the transformation, owners adaptation programs should develop by the Project management and local administrations.
- Unlike other country examples, very large areas are being transformed in Turkey.
- A new understanding of project development is needed.
- New methods should be developed in land acquisition.
- Housing management to built environment management.
- Institutionalization of facility management in general and the requirement for improving the residential property management.



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***Thank you so much for your attention...***

**Esra URAL KESKİN - Yeşim TANRIVERMİŞ – Harun TANRIVERMİŞ**

Department of Real Estate Development and Management,  
Faculty of Applied Sciences, Ankara University, Turkey

[esra.keskin@ankara.edu.tr](mailto:esra.keskin@ankara.edu.tr); [aliefendioglu@ankara.edu.tr](mailto:aliefendioglu@ankara.edu.tr); [tanrivermis@ankara.edu.tr](mailto:tanrivermis@ankara.edu.tr)



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