



EXAMINING THE MORPHOLOGICAL CHANGE OF AKSARAY CITY IN THE HISTORICAL PROCESS ACCORDING TO UPPER-SCALE INVESTMENT DECISIONS

AKSARAY KENTİNİN TARİHSEL SÜREÇTE MORFOLOJİK DEĞİŞİMİNİN ÜST ÖLÇEKLİ YATIRIM KARARLARINA GÖRE İNCELENMESİ

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Received/Geliş tarihi: 03.04.2024

Benzerlik Oranı/Similarity Ratio: %10

Revision Requested/Revizyon talebi:

07.05.2024

Last revision received/Son revizyon teslimi:

13.05.2024

Accepted/Kabul tarihi: 18.05.2024

Etik Kurul İzni/ Ethics Committee Permission:
Çalışma için etik kurul izni gerektirmemektedir.

Citation/Atıf: Kuyrukçu, Z. & Akbaş, M. (2024). Examining The Morphological Change Of Aksaray City In The Historical Process According To Upper-Scale Investment Decisions. The Turkish Online Journal of Design Art and Communication, 14 (3), 560-576.
<https://doi.org/10.7456/tojdac.1464062>.

Abstract

This study aims to analyze the changes in the urban morphology of Aksaray according to upper-scale investment decisions. The research determined three investments that caused recent morphological development and change for Aksaray as breaking points. These are the opening of the Mercedes Factory in 1986, the establishment of Aksaray University in 2006, and the relocation of Aksaray State Hospital in 2018. According to these three investment decisions, the morphological change of the city was investigated on an urban scale and periodically from an observer's perspective. Development plans and aerial photographs were used to reveal the periodic differences between these three investments that impact the morphological structure of the city. The morphological change in the city form in three different periods, 1986-2006, 2006-2018, and 2018-2024, was examined through the city perimeter and building blocks. The examination determined that with the increasing population in Aksaray, industry, health, education, and management functions moved out of the city. From the opening of the Mercedes Truck Factory in 1986 to 2006, urban growth generally took place in the north-south direction. Although the city's orientation was towards the southwest after establishing Aksaray University in 2006, there was no intense interaction between the university and the city until 2018. Since 2018, with the New Hospital's opening and the New Municipality's construction, the city's influence area has completely shifted to the west. The city's development is anticipated to continue in 2024 and beyond, depending on the newly constructed municipality service building.

Keywords: Morphological Analysis, Urban Growth, Historical Change, Urban Morphology.

Öz

Bu çalışmada Aksaray'ın kent morfolojisinde yaşanan değişimlerin üst ölçekli yatırım kararlarına göre analiz edilmesi amaçlanmıştır. Bu doğrultuda yapılan araştırma ile Aksaray kenti için morfolojik açıdan yakın dönemde gelişime ve değişime neden olan üç farklı yatırım, kırılma noktası olarak belirlenmiştir. Bunlar sırasıyla 1986 yılında Mercedes Fabrikası'nın açılması, 2006 yılında Aksaray Üniversitesi'nin kurulması ve Aksaray Devlet Hastanesi'nin 2018 yılında yer değiştirmesidir. Bu üç yatırım kararına göre kentin morfolojik değişimi kentsel ölçekte ve dönemsel olarak gözlemci bakış açısıyla araştırılmıştır. Şehrin morfolojik yapısına etki eden bu üç yatırımın dönemsel farklılıklarını ortaya koyabilmek için imar planları ve hava fotoğraflarından yararlanılmıştır. 1986-2006, 2006-2018 ve 2018-2024 olmak üzere üç farklı dönemin kent formundaki morfolojik değişimi, kent çeperi ve yapı blokları üzerinden incelenmiştir. Yapılan inceleme ile Aksaray kentinde artan nüfus ile sanayi, sağlık, eğitim ve yönetim işlevlerin kentin dışına taşıdığı ve bunun sonucunda kent morfolojisinde değişimler olduğu tespit edilmiştir. 1986 yılında Mercedes Kamyon Fabrikası'nın açılmasından 2006 yılına kadar olan süre zarfında kentsel büyüme genellikle kuzey-güney doğrultusunda gerçekleşmiştir. 2006 yılında Aksaray Üniversitesi'nin kurulmasından sonra kentin yönelimi güneybatıya doğru olsa da 2018 yılına kadar üniversite-kent arasında yoğun bir etkileşim yaşanmamıştır. 2018 yılından itibaren Yeni Hastane'nin açılması ve Yeni Belediye Binası'nın yapılmaya başlanmasıyla kentin etki alanı tamamen batı yönüne kaymıştır. 2024 yılı ve sonrasında ise kentin gelişiminin yeni yapılan belediye hizmet binasına bağlı olarak devam edeceği öngörülmektedir.

Anahtar Kelimeler: Morfolojik Analiz, Kentsel Büyüme, Tarihsel Değişim, Kentsel Morfoloji.



INTRODUCTION

Cities have always had strategic importance with their location in their geography. Cities, one of the most important spatial formations of the contemporary world, express the way an age is formed. Cities will inevitably experience some change and transformation processes because of the regulations in the zoning plans, geographical factors, demands and needs of the people over time. This change is continuing with the increase of places that aim to enable the population to move comfortably within the city and respond to its many needs. This transformation, which cities undergo with their formal and structural features, is examined with urban morphology studies (Sakar & Ünlü, 2019). Urban morphology is a branch of science that examines the dynamic structure of cities in the historical process; history, geography, architecture, urban planning, landscape architecture, etc. It emerges as a field of study that encompasses disciplines (Boz & Kubat, 2018).

In its most general definition, urban morphology is the study of the change in the physical texture of the urban form and the actors and processes that cause this change (Jones & Larham, 1991). The urban form covers the urban patterns created by the street, parcel, and buildings, which are the basic physical components of the city (Oliveira, 2016). He emphasizes that urban morphological research aims to develop an explanation of how the urban pattern is formed and transformed and how the components that make up the urban pattern relate to each other (Kropt, 2014).

Numerous studies have been conducted in urban morphology to understand the effects of physical changes in urban space on human behavior and urbanization. Urban morphology studies are generally concentrated in Central Europe, England and North America (Sınmaz & Özdemir, 2016). The studies on this subject have been shaped in English, French and Italian schools. As a result of the studies carried out in these schools, it has been accepted that the city form consists of buildings, parcels and streets and can only be understood historically due to its continuous transformation (Küçük & Kubat, 2015).

Aksaray, which has hosted many civilizations, is located on a historical commercial axis and has been following a continuous development due to all these, is a city where we can see morphological changes over time. The city of Aksaray has experienced both socio-economic and physical changes throughout history. This study aims to reveal the morphological changes experienced in the city form in the historical process after Aksaray became a province, to determine the reasons for the change in the city form, and to provide a basis for the morphological changes of the city in future periods. In this direction, the study first aims to identify and present the upper-scale investment decisions that have affected the spatial distribution of Aksaray City in the recent period. These upper-scale investments impacted the morphology of the city. The first stage was the establishment of the Mercedes Truck Factory in 1986, the second was opening Aksaray University in 2006, and the third was relocating Aksaray State Hospital in 2018. According to these investment decisions determined within the scope of the study, the historical analysis of the city of Aksaray was made using zoning plans, written and visual sources, and aerial photographs.

MATERIAL AND METHOD

Urban planning decisions implemented throughout the history of Aksaray, which is in a central location in Turkey and the physical change it has undergone are emphasized. In this context, how the selected breaking points are affected by urban planning decisions throughout the historical development process was examined through morphological analysis. In this study, the morphological change of the urban form according to the determined breaking points was investigated from an observer point of view on an urban scale and periodically by overlapping zoning plans and aerial photographs. Three different periodic changes 1986-2006, 2006-2018, and 2018-2024 were analyzed comparatively, and morphological changes in urban form were interpreted over these three periods. This morphological analysis was carried out on the urban fringe and building blocks.

First, in the study; The macro form of Aksaray, which changes over the years, has been analyzed and the comprehensibility of the context of the symbolic regions selected through historical plans and aerial photographs in the city has been emphasized. Afterward, the regions with the selected breaking



points were analyzed as separate periodic studies. For each period, regions heavily affected in social, historical, and morphological contexts were identified. The morphological analysis process for the study area is under the urban planning analysis; It was planned as the analysis of historical maps, the analysis of the current situation and the analysis of visual images of the historical change process, and the change of each urban element was analyzed and tabulated. Three different periods examined during the morphological analysis phase were evaluated together because of the study, and inferences were made about the historical change process of Aksaray with periodic comparisons.

AKSARAY CITY WITH HISTORICAL AND URBAN DEVELOPMENT PROCESS

Thanks to the archaeological excavations carried out around Aşıklı Höyük and Acem Höyük, it has been revealed that Aksaray has been home to settled life since prehistoric times (Gülçur, 1999). Aksaray, which has a history of ten thousand years, hosted civilizations such as Hittite, Persian, Hellenistic Period, Rome and Byzantium before being dominated by the Turks (Eskin & Doğanay, 2018). After the victory of Manzikert in 1071, Aksaray and its surroundings fell into the hands of the Turks with the conquest of Cappadocia by Danishmend Ahmet Gazi. It joined the Seljuk lands during the reign of the Anatolian Seljuks Sultan Mesut I. Aksaray experienced its golden age during the Seljuk period. After Konya became the capital, Aksaray became the most important settlement and military base established on the road to the east. Aksaray, under the rule of the Eretnians after the Anatolian Seljuks and then the Karamanoğulları, came under the control of the Ottoman Empire during the reign of Fatih Sultan Mehmet. During this period, the people of the city were forced to migrate to Istanbul. As a result, the city became empty and lost its former glory (Erdal, 2014). Aksaray district of Istanbul was established by families who migrated from this city on time (Baylak & Taş, 2021).

It is mentioned that there is a castle that forms the core of the city in the Aksaray district, which has hosted many civilizations. The city likely had fortifications surrounding it, as it was at the crossroads of significant commercial, military, and religious routes. Although it is not known exactly by whom and when the castle, a very small part of which has survived to the present day, is not known exactly, according to historical sources, the existence of the castle dates to the early ages (Ağır, 2021). Although Aksaray Castle was destroyed today, it continued to be the center of the city and the city form developed around this castle (Table 1).

Table 1. Historical development of Aksaray Castle (City Center)

	
<p>Aerial view of Aksaray, 1954 (Ağır, 2021)</p>	<p>Aerial view of Aksaray, 2024 (Google Earth software was used)</p>

Aksaray, founded on the lands watered by Melendiz Stream (Uluirmak), has gained the opportunity to develop thanks to its position on historical trade routes. Since it was established as a portless city because of its geographical location, the city is restricted by a certain growth limit (Aytekin, 2018). During the Seljuk period, which provided the security and stability required for trade by dominating Central Anatolia, the shortest route of the Konya-Kayseri-Sivas connection, which were important cities in terms of population and trade, passed through Aksaray (Figure 1). The Silk Road, which was branching out in Anatolia, also included Aksaray. When it came to the Ottoman period, Aksaray entered a process of relative decline. Aksaray, which remained a sanjak of Konya until the Republican period, was connected to Niğde as a district in 1933. Aksaray, which gained the status of a province on June 15, 1989, has developed since the second half of the 20th century, and by 2024, it has gained a city structure focused on agriculture, trade, and industry.

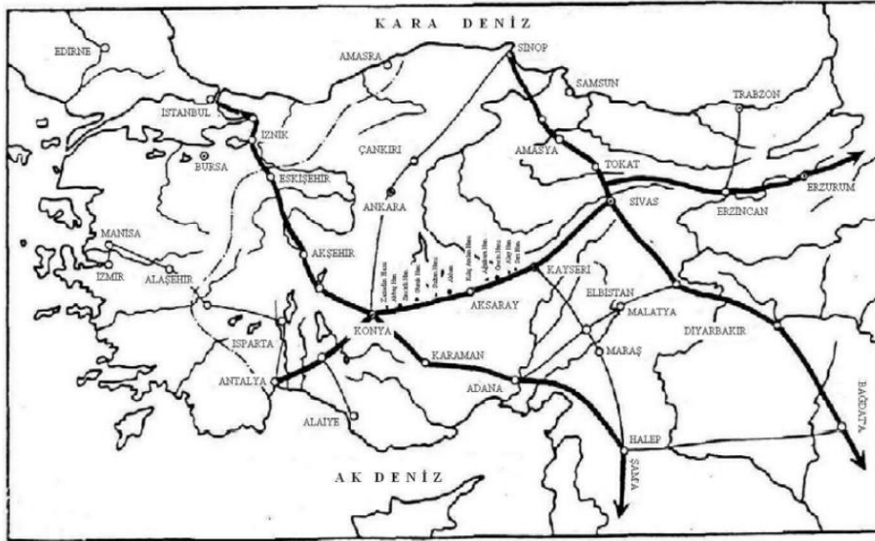


Figure 1. Historical Trade Routes (Topal, 2006).

Located in the Middle Kızılırmak Division of the Central Anatolia Region, Aksaray, the east-west is on the E-90 highway, at the junction of the main connecting roads of the southern–north. It is bordered by Nevşehir to the east, Niğde to the southeast, Konya to the west, Ankara to the north, and Kırşehir to the northeast (Figure 2). Although it is located on the main connecting roads, no railway network exists. The nearest airport in the area is Nevsehir Cappadocia Airport, 75 km away.

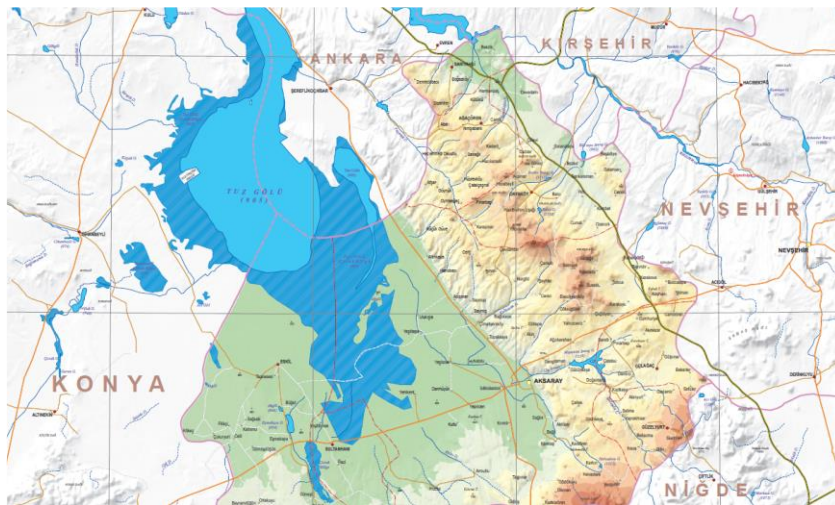


Figure 2. Physical Map of Aksaray (Harita Genel Müdürlüğü, 2024).

According to the results of the 2023 Address Based Population Registration System, the population of Aksaray was 438,504 people. In the central district of Aksaray, 321,160 people live (TÜİK, 2024). Today, there are 48 neighborhoods in the central district, and the settlement boundaries of these neighborhoods are shown in Figure 3.



Figure 3. Settlement boundaries of the neighborhoods that make up the central district of Aksaray (Aksaray Belediyesi, 2024).

While the hilly areas to the east of Aksaray adversely affect the urban settlement and development, the Melendiz Stream, which passes through the city, divides the city into two parts, north and south. While the swampy areas in the city's southwest limited the settlement, the Aksaray plain (Figure 4) extending to the west provided a suitable environment for the city's development other than agriculture (Arıbaş, 2008).

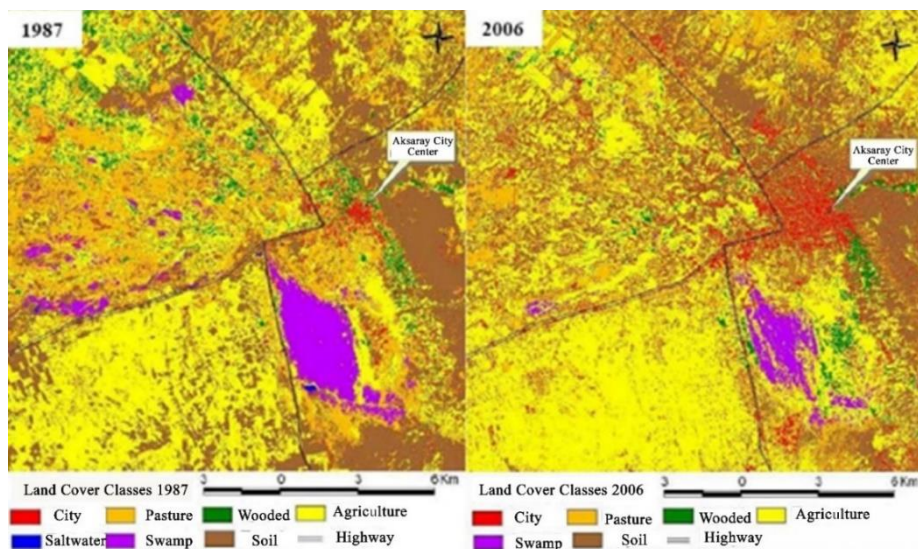


Figure 4. Land cover of Aksaray City changing according to years (Yılmaz, Reis, & Atasoy, 2007).

PLANNING STUDIES IN AKSARAY CITY

When the high-scale planning studies carried out in Aksaray from the past to the present were examined; it was determined that the zoning plans were carried out in 1939, 1948, 1972, 1983, and 2003.

• Architect Seyfi Arkan Plan (1939-1948 period)

It is estimated that Architect Seyfi Arkan was the one who carried out the first zoning plan study for Aksaray in 1939. However, no drawings related to this study could be found. Therefore, it could not be determined what kind of work was carried out in which field.

• Celal Esat Arseven Plan (1948-1972 Period)

The zoning plan prepared by C. Esat Arseven covers only the city center. Drawings of this plan could not be reached.

• Iller Bank Plan (1972-1983 Period)

With the industrialization process that started after the 1950s, the urban population started to increase. Thus, in 1967, there was a need to make a new plan for the city of Aksaray. The zoning plan, which was approved in 1972, was prepared by Iller Bank. In this plan, the current center of the city was generally created. Drawings of this plan could not be reached.

• Bülent Berksan - Mehmet Ali Topaloglu Plan (1983-2003 Period)

It is the first zoning plan for the city of Aksaray, the drawings of which can be accessed today (Figure 5). Prepared by Bülent Berksan and Mehmet Ali Topaloglu. The existing cadastral situation was used in the preparation of this plan. The size of the construction and the number of floors of the residential areas and development areas are defined without leaving them to the regulations. As a result of Aksaray's transition to provincial status in 1989, increasing population growth and urbanization, and the inadequacy of the existing zoned areas and their inability to meet the needs, additional zoning plans came to the fore (Balta, 2022). In this direction, an additional zoning plan of 15 plots was made in 1992. The total planning area consists of 5646 hectares.

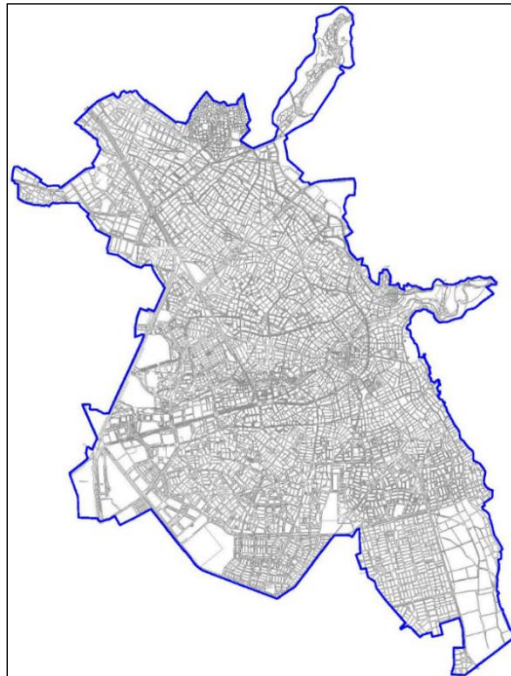


Figure 5. Bülent Berksan - Mehmet Ali Topaloglu Zoning Plan, 1983 (Doğukan İmar, 2012).

• **Selçuk University City and Regional Planning Department Plan (2003-2024 Period)**

The zoning plan prepared by the Department of City and Regional Planning of Selçuk University in 2003 continues the 1983 zoning plan. In the southern part of the city, residential areas protect the agricultural structure, and the northern region is planned as a development area. The total area of the initially planned area is approximately 8335 hectares (Figure 6). In 2012, there was a need for a revision of the zoning plan due to the closure of the Aratol and Hamidiye municipalities and their connection to the Aksaray Municipality and the areas joined by the Sağlık Municipality. As a result of the revision of the zoning plan made by Doğukan İmar, the planning area has reached 10460 hectares (Figure 7). With the revised zoning plan, 15 planning zones were created, including 6 main regions.



Figure 6. Selçuk University City and Regional Planning Zoning Plan, 2003 (Doğukan İmar, 2012).

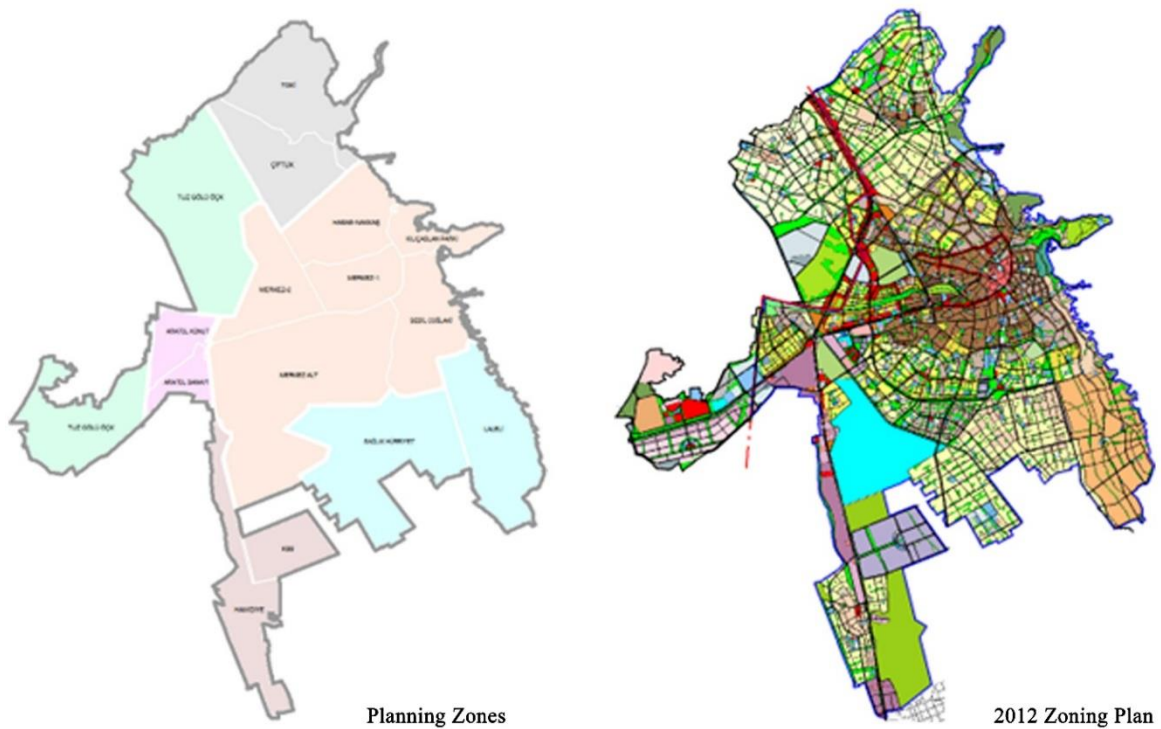


Figure 7. Planning Zones, and Revision Zoning Plan, 2012 (Doğukan İmar, 2012).

MORPHOLOGICAL CHANGE OF AKSARAY CITY ACCORDING TO INVESTMENT DECISIONS

To analyze the morphological change of the city of Aksaray in the historical process more systematically, high-scale investments affecting the urban form in the recent period have been determined within the scope of the study. According to these investment decisions, the morphological change in the urban form of three different periods was examined in terms of the urban fringe and building blocks, and the situations that led to these investments were evaluated on an urban scale.

Morphological Analysis of Aksaray Between 1986-2006

In this section, the morphological change of the urban form from the establishment of the Mercedes Aksaray Truck Factory in 1986 and the establishment of Aksaray University in 2006 after Aksaray became a province in 1989 was analyzed.

Aksaray Truck Factory was established in 1986 at the intersection of Konya-Aksaray and Ankara-Adana highway, west of the city center and about 6 km away (Figure 8). Today, it has a closed area of 690,000 m² on a land of 140,000 m². In 1986, the factory employed 290 people; today, with more than 1,600 employees, Aksaray is one of the largest employers (Anonim, 2024). The establishment of such a large investment in a relatively small-scale city will directly affect the spatial development of the city. For this reason, the Mercedes Truck Factory, which was established in 1986 to read more clearly the changes in the city form, was determined as the first breaking point in the scope of the study.



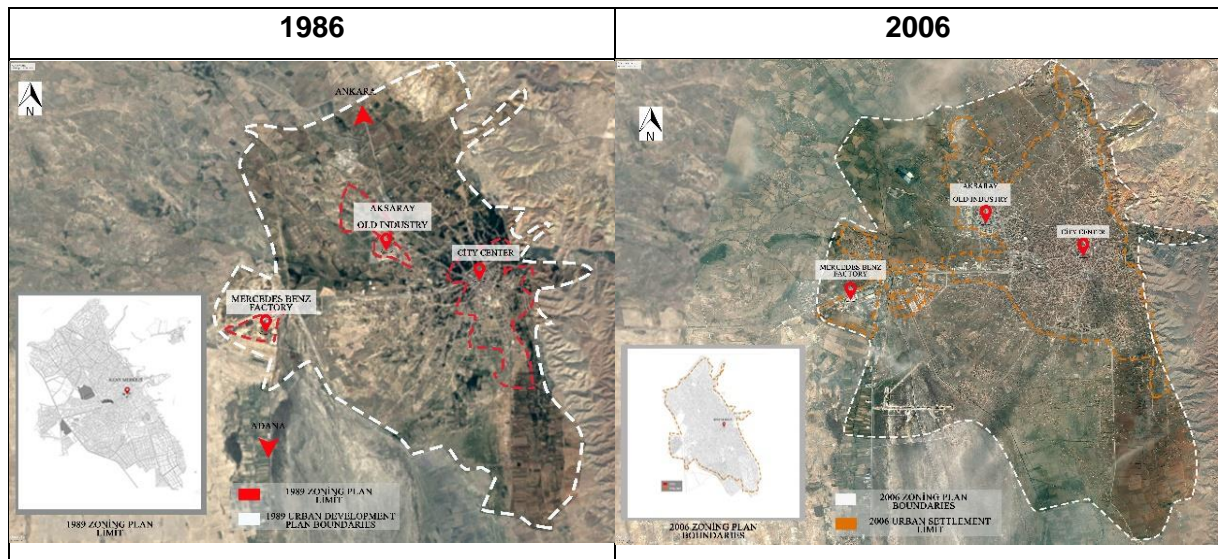
Figure 8. Urban location of the Mercedes Truck Factory, 2023 (Produced from maps downloaded from the Google Earth software).

While there was no settlement area around the factory at the beginning, the number and width of the roads increased in parallel with the construction on the north and east sides of the factory. Still, no significant change was observed in terms of subdivision in the zoning plan. The city form of Aksaray, which started with the establishment of Mercedes Aksaray Truck Factory in 1986 and continued until Aksaray University in 2006, has expanded considerably. According to a study by (Arıbaş, 2008), in 1987, urban areas with 1223 hectares reached 2006 to 4795 hectares. This shows that the city has grown approximately four times. This is also supported by an analysis of aerial photographs (Table 2).

There is a significant increase in the number of constructions until 2006. While the total number of licenses issued before Aksaray gained provincial status was 4548, this figure reached 9742 between 1989 and 2003 (Atasoy vd., 2007). The increase in demand at this rate has brought positive and negative results in terms of urban morphology. Aratol, located on the periphery of the city, where the Sağlık, Hamidiye Alaca, and Mercedes Truck Factory are located, was connected to the center during this period.

Establishment of a small industrial site on the E-90 highway in the northwest of the city, outside the residential areas, in 1984, and the start of education at Selçuk University Vocational School in 1986, in a location close to the Aksaray Truck Factory, between Aksaray city center and Aksaray Truck Factory. In 2000, the development of the city in the western direction was supported by the opening of the Aksaray Municipality Intercity Bus Terminal on the highway connecting Aksaray city center and Aksaray Truck Factory. However, until 2006, the development of the city perimeter and buildings was predominantly towards the north and south, and with the increase in facilities serving those using intercity roads in the west, the construction only increased along the highway. It is supported by maps that there is a higher density of settlements, especially in the area bordered by the Ankara-Adana Road in the west and the Aksaray-Nevşehir Road in the north, and to the north of the Melendiz Stream, which extends east and west and divides the city into two.

Table 2. Morphological change of Aksaray between 1986-2006 (Prepared with the interpretation of the maps downloaded from the Google Earth software and taken from the Aksaray Development Directorate)



Morphological Analysis of Aksaray between 2006-2018

In this section, the morphological change of the city form was analyzed from the establishment of Aksaray University in 2006 to the relocation of Aksaray State Hospital in 2018.

Before the establishment of Aksaray University, the first steps regarding higher education were taken in 1986. In this direction, education was started as a Vocational School affiliated to Selçuk University. Considering the city's development at that time, it was deemed appropriate for this college to be in the west of the city, close to the Aksaray Mercedes Truck Factory. With Niğde University, which was established in 1992, all existing units are connected to this university. The city of Aksaray has also benefited from the policy of opening 'one university for each province,' which started in 2006 and was completed in 2008. A new university was established in 2006 under the name of Aksaray University, and all units in Aksaray affiliated with Niğde University were transferred to this university. As a result, the necessity of planning all the units that make up the university together came to the fore, and a location was chosen for Aksaray University in the southwest of the city, on the Ankara-Adana highway, approximately 8 km from the city center (Figure 9). Because the area where the site was

selected was swampy, construction was carried out after the ground improvement works. The general understanding in this period is that the establishment of universities outside the city center will contribute to the morphological development of the city in the historical process.

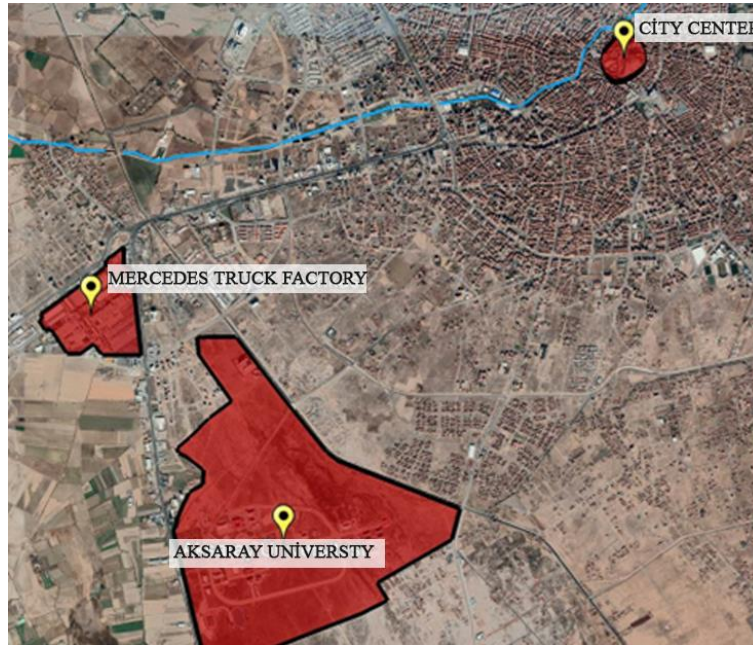
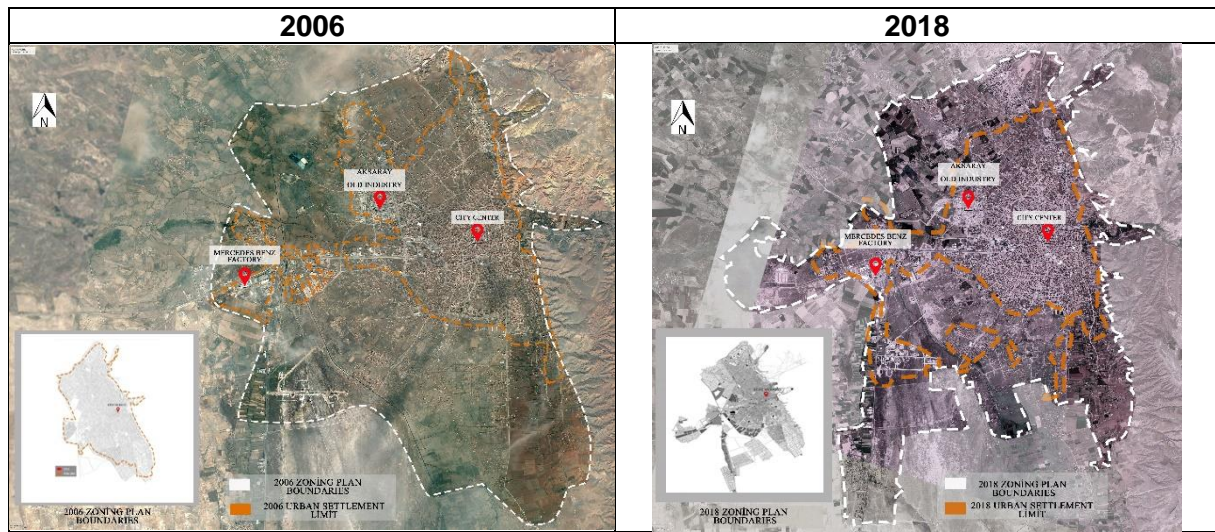


Figure 9. Urban Location of Aksaray University, 2023 (Produced from maps downloaded from the Google Earth software)

At the time the campus was opened, there was no obvious zoning activity and building texture around it. In the process that started in 2006 and continued until 2018, industrial and recreational facilities on the Ankara-Adana highway started to increase. The most important reason for this increase is that Aksaray Mercedes Truck Factory and Aksaray University Campus are located close to each other, and these two settlements are located on the Ankara-Adana highway (Figure 10). During this period, it is seen from satellite photographs that alternative roads were opened as a solution to the transportation problem between the university and the city center and that the city grew in a limited way in terms of space toward the university. In this period, the university-city relationship could not be adequately provided in terms of space, and the interaction of the people living in the city with the university in terms of transportation remained weak.

The city of Aksaray continued to grow in the north, south, and west directions (Table 3). In the north, urban development has spread to the other side of the Aksaray-Nevşehir highway new neighborhoods consisting mainly of detached and garden-style houses have started to form. Residential areas were observed in the west opposite the Aksaray Mercedes Truck Factory and in the north of the Konya-Aksaray highway, and the construction increased in the area between the Aksaray Mercedes Truck Factory and the city center. However, on the Konya highway route of Aksaray, just east of the Aksaray Mercedes Truck Factory, a large building group consisting of different functional units such as a bus station, wholesalers, gallery owners, private hospital, fruit and vegetable market, educational facilities have prevented the development of the city to the west. In the south of the city, although new urban areas have started to develop outside Alparslan Türkeş Boulevard, which is an urban threshold, the swampy area in the southwest of the boulevard has slowed down the development rate of this region compared to the north of the city.

Table 3. Morphological change of Aksaray between 2006-2018 (Prepared with the interpretation of the maps downloaded from the Google Earth software and taken from the Aksaray Development Directorate)



Morphological Change of Aksaray Between 2018-2024

In this section, the morphological change of the urban form from the relocation of Aksaray State Hospital in 2018 to the present day has been analyzed.

The location of the State Hospital, which was in the north of the city center, was changed and moved to 4 km northwest of the city (Figure 10). This decision showed that the hospital structure was obsolete and insufficient for the increasing urban population. As a result, the construction of a new hospital with 400 beds was started in 2015, and its construction was completed and put into service in 2018. The absence of an urban texture surrounding the new hospital and the fact that there are generally agricultural lands around it made it necessary to build new roads to reach the hospital. Road routes have been created to provide a direct connection from the city center and via the Konya-Aksaray highway.

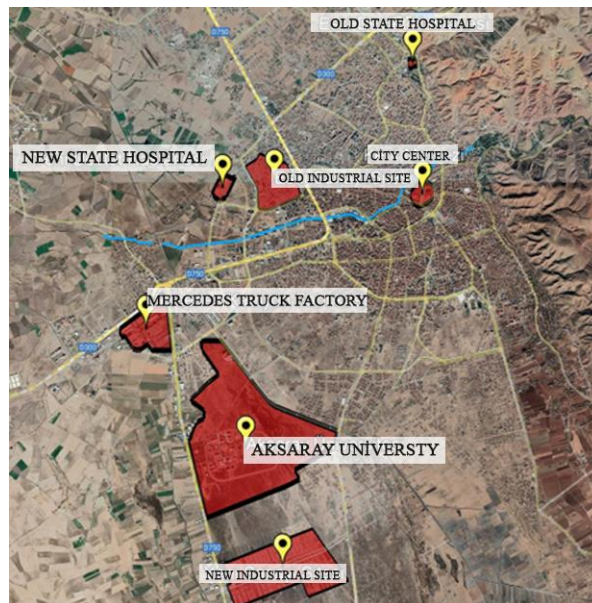


Figure 10. Urban location of New State Hospital, 2023 (Produced from maps downloaded from the Google Earth software).

The presence of an industrial site dating back to 1984 as the closest urban function to the hospital has been questioned. As a result of the city's growth, it was decided to move this industrial plant out of the city because it caused both image pollution and traffic problems. In this direction, a new industrial project has been started on the Ankara-Adana highway in the southwest of the city, close to Aksaray University. The old industrial site was evacuated entirely in 2022, and the trades were moved to the new industrial site.

Urban investment continued during this period. Aksaray Municipality Service Building in the city's center, a new Aksaray Municipality has been required at a different point in the city for reasons such as insufficient, causing traffic intensity, and losing usefulness. In 2021, it started to be built on the Konya-Aksaray highway route in the parcel adjacent to the intercity bus terminal (Figure 11). Construction work is ongoing. The city's development is anticipated to continue in 2024 and beyond, depending on the newly constructed municipality service building.



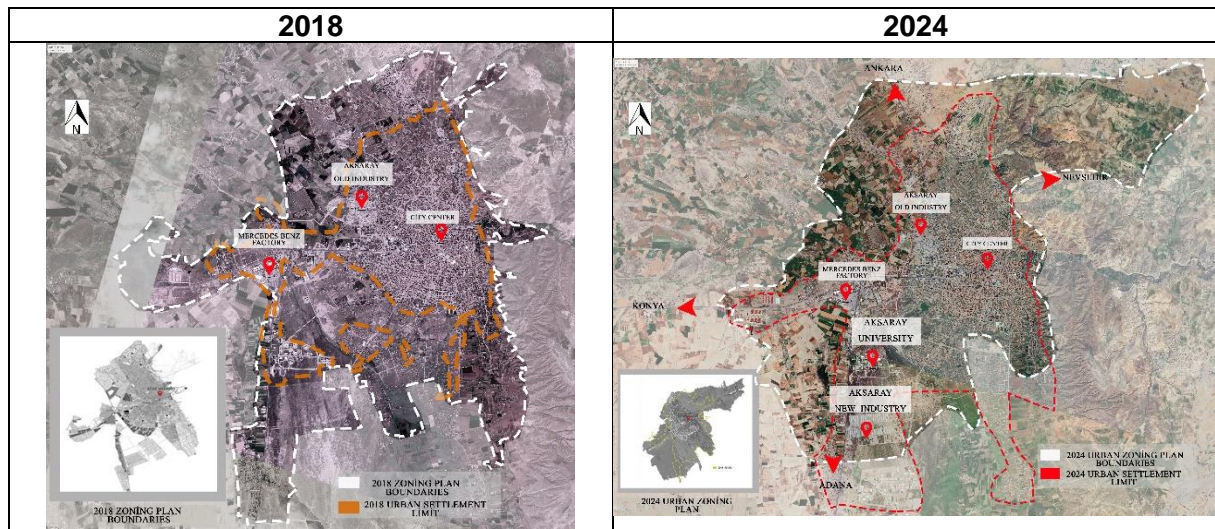
Figure 11. Urban location of the New Municipal Service Building, 2023 (Produced from maps downloaded from the Google Earth software).

With these developments in the city, it is seen that the units that will affect the morphology of the city, especially industry, health, management, and education, are located outside the city center. It is expected that the burden of the city will be eased, and new centers of attraction will be created in these areas. Such spatial movements impact the morphology of the city on a building basis. Although there were significant changes in the zoning plan in the southwestern and northeastern parts of the city, the building density was not seen in these areas (Table 4). The population of the city center, which was 295,351 in 2018, increased to 321,160 by 2024. Population growth was observed more in the western neighborhoods of the city center rather than the population increase in the central neighborhoods. The proximity of Tacin and Hacilar Harmanı neighborhoods, which are among these neighborhoods, to both the new hospital structure and the municipal service building under construction has brought about a significant increase in structural and population density and will continue to do so.

Although Mercedes Truck Factory has been in operation for more than 30 years, a limited increase has been observed in commercial units, listening facilities, residential buildings and building density around the factory compared to other periods. The existing urban texture on the north side of the factory has maintained its continuity and there has been no significant increase in this region. Today, it has become difficult for people in the city to settle in this region since Aratol Neighborhood, where the Mercedes Truck Factory is located, is far from industry, hospitals, university, and administrative units.

The opening of roads that will establish a direct connection between the Aksaray University campus and the city continued. In this direction, the connection of a road that provides access to the campus from the southwest of the city without using the Ankara-Adana highway has been completed. There has been no intense increase in construction around the campus except for the new industrial zone that opened in 2022 on the south side of the Ankara-Adana highway. One of the reasons for this is that the ground structure of the region is unsuitable, and the water channel between the city and the university, extending in the north-south direction, acts as a natural threshold. In addition, the lack of development of transportation connections to the city center has made the campus a more closed and disconnected settlement from the city center.

Table 4. Morphological change of Aksaray between 2018-2024 (Prepared with the interpretation of the maps downloaded from the Google Earth software and taken from the Aksaray Development Directorate)



Periodic Comparison of Morphological Change of Aksaray According to Investment Decisions

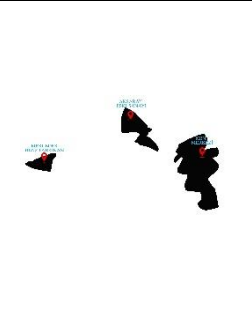
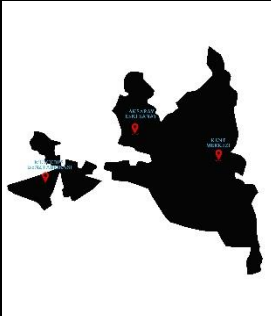
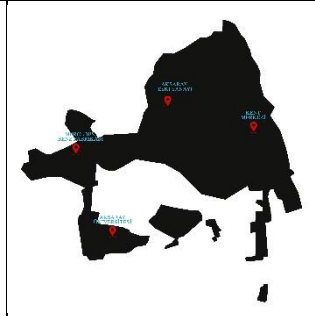
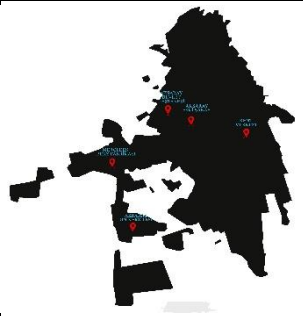
The city of Aksaray developed around the settlement nucleus described as Aksaray Castle until the 1990s. Since the 1980s, it is seen that urban areas have grown with investments such as the opening of the Mercedes Truck Factory and gaining provincial status in 1989. Until 2006, urban growth was generally in a north-south direction. During this time, because of the city's fourfold growth, the urban form developed in four different directions.

This change was seen in the Çiftlik Neighborhood in the north, the Yavuz Sultan Selim and Hürriyet Neighborhoods in the south, the Aratol Neighborhood in the west, and the Kanlar Neighborhood in the east. Although the city's orientation was towards the southwest after establishing Aksaray University in 2006, there was no intense change and development between the university and the city until 2018.

Since 2018, efforts have been underway to shift the building density in the city center to the west of the city (Figure 12). This can be seen in zoning plans (Figure 13). According to satellite photographs, because of the new hospital, the new industrial site and the roads built around Aksaray University and the facilitation of transportation to the west of the city, the building communities in these regions have increased, and the urban fringe has expanded. To relieve the transportation problem to the hospital and the traffic density, three different road routes were opened from the city center, from the Konya-Aksaray and Aksaray-Nevşehir highways. With the opening of new roads, it is seen that the building density in the old industrial zone is moving towards the hospital area (Table 5).

The construction of a new boulevard connecting the newly constructed municipality service building, starting from the intersection points of Hürriyet and İstiklal neighborhoods, the starting point of the Aksaray adjacent area, continues. These initiatives support that the roads shaped according to the city's morphology will develop in the western direction in the coming years.

Table 5. Comparison with urban planning analysis by year (Google Earth software was used)

1986	2006	2018	2024
			

To reveal the morphological change of the city of Aksaray, it is seen that there are differences between the developments in the zoning plans and the structural changes examined from satellite photographs according to the determined periods. Between 1986 and 2006, while the city periphery expanded because of the structural increase mainly in the north and south of the city, there was no such development in the zoning plans. After 2006, this situation continued in the west of the city, and there was also a development in the western direction of the city in the zoning plans. Since 2018, with the importance of intercity roads, the development in the west and southwest directions has become more dominant in the city. During these years, construction has also increased, such as parcels around the university. Between 2018 and 2024, new subdivision areas were created for the urban form. The change in the zoning plan seen in the south of the Mercedes Factory and the northeast of the city center has not yet been reflected in the building density. Construction is predicted to increase in the coming years as these regions gain importance (Figure 12).

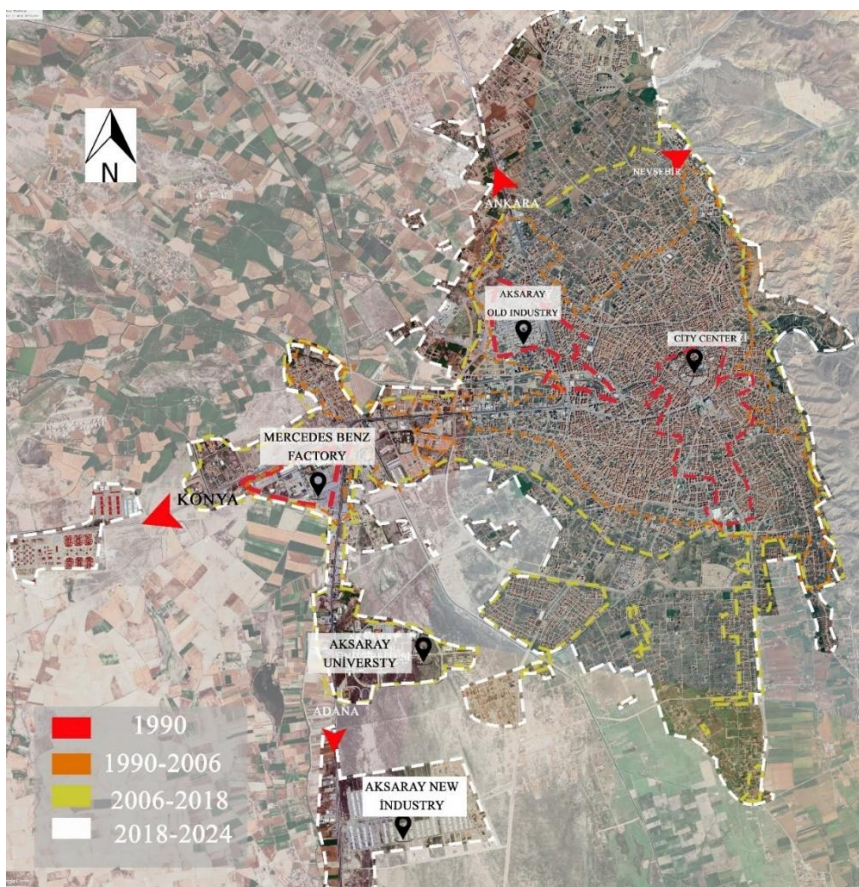


Figure 12. Changes in the macro form of Aksaray City over the years (Google Earth software was used)

As a result of the analysis, it was observed that while there was a morphological increase in the zoning plans, the total building area increased less than the parcel area. The reason for this is that although the scope and width of the roads have increased on intercity and urban roads, the transportation connection to the parcels remains weak because of infrastructure deficiencies (Figure 13).

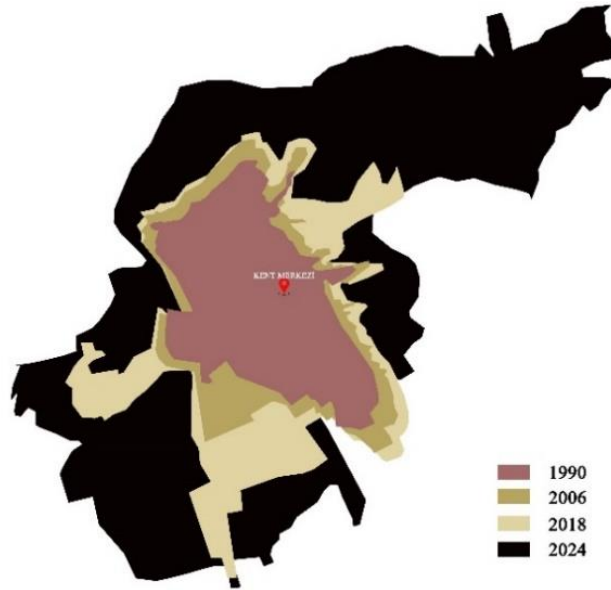


Figure 13. The change of Aksaray city center zoning plans by years

It is seen in satellite photographs that the neighborhoods located in the south and southwest of the city are not sufficiently developed in terms of construction based on the zoning plans. This situation shows the lack of studies in the region and forms a morphological structure detached from the center in these areas.

CONCLUSIONS AND SUGGESTIONS

Aksaray, a Seljuk city, was founded on fertile lands for agriculture, watered by Uluirmak. Therefore, for many years, a large part of the economy of Aksaray has been based on agriculture. Efficient and extensive farmland, meadows and pastures cover many of the provincial boundaries. Aksaray, the feature of being an agricultural city has continued to the present day. With production capacity and employment opportunities, Mercedes Truck Factory, one of the biggest investments in the province, has entered a rapid urbanization process with its opening in 1986 and becoming a province in 1989. This urbanization process has led to the development of agriculture as well as trade, industry, and service sectors. Thus, several changes and development processes started to take place in the form of the city. With this study, changes in the urban morphology of Aksaray have been analyzed since 1986.

During the 1986–2024 period of 38 years of change and development of the Aksaray, the overflow of industrial, health, education and management functions outside the city caused the neighborhoods to shift to the city’s periphery. However, because the most intense commercial life in Aksaray continues to take place around Aksaray Castle, where the first settlement was located, there was no change in the central position of the city despite the growth and development experienced in the city. Although the city has progressed to the west gradually since the establishment of the Mercedes Truck Factory in 1986, we cannot say that this connection has been strongly established. Since the departure of Aksaray University from the University of Niğde in 2006 and its direct connection with the city has been provided through a single route and the surrounding structuring has progressed more slowly than on-campus construction. Since 2018, with the opening of the New Hospital and the construction of the New Town Hall, the city’s area of influence has shifted completely to the west. The new municipal service building and the density of buildings and housing in the city will be concentrated in this region. The city’s new headquarters will be based in the City Hall, State Hospital and Mercedes Truck Factory area. The presence of the bus terminal in this area will increase the intensity of people and

traffic. This development in the city, if not controlled and planned, these areas, which are complex and intertwined, will bring both traffic density and environmental problems like the city center of today.

The increasing urban population of Aksaray has led to the re-functioning of urban units such as hospitals, industry, and administration. Although more than 30 years have passed since it became a province, there are also residential areas where there are concerns with the changes in the urban morphology. When the city form of Aksaray was examined in terms of zoning plans and aerial photographs, it was concluded that there was no integrated urban planning. In the city of Aksaray, which provides most of its economy from agriculture and animal husbandry, every part of the fertile land is extremely important. For this reason, the interaction of interrelated sectors should be observed in the urban setup of Aksaray, which is in the process of change and development, and the planning of urban parts should be carried out in an integrated manner.

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