



Natural and Cultural Heritage as Drivers of Urban Resilience: Insights from Bursa, an Anatolian/Turkish City

Rengin BECEREN ÖZTÜRK^{1*} , Arzu ÇAHANTİMUR² 

ORCID 1: 0000-0001-6259-3364

ORCID 2: 0000-0002-5907-1773

¹ Bursa Uludağ University, Faculty of Architecture, Department of Architecture, 16059, Bursa, Türkiye.

² Bursa Uludağ University, Faculty of Architecture, Department of Architecture, 16059, Bursa, Türkiye.

* e-mail: renginb@uludag.edu.tr

Abstract

This study examines how the natural and cultural heritage of Bursa—one of the earliest examples of an Anatolian–Turkish city—serves as a foundational driver of urban resilience. Drawing on a socio-ecological systems perspective, the research analyzes the city’s historical development, settlement morphology, and institutional structures, with particular focus on the waqf–imaret system that shaped social welfare, urban services, and spatial organization. Bursa’s topography-sensitive urban form, strong urban–rural linkages, and culturally embedded community networks enabled the city to absorb, adapt, and recover from repeated shocks, including fires, earthquakes, and socio-political disruptions. Findings demonstrate that cultural heritage in Bursa is not only a passive legacy but an active resilience resource that supports wellbeing, social cohesion, strategic governance, and environmental adaptability. The paper argues that the structural logic of the Anatolian–Turkish city offers valuable insights for contemporary resilience planning and provides a heritage-informed framework for sustainable urban development.

Keywords: Urban resilience, cultural heritage, waqf–imaret system, socio-ecological systems.

Kentsel Dirençlilikte Doğal ve Kültürel Mirasın Rolü: Anadolu/Türk Kenti Bursa’dan Çıkarımlar

Öz

Bu çalışma, Anadolu–Türk kentinin erken örneklerinden biri olan Bursa’nın doğal ve kültürel mirasının kentsel dirençliliğin temel bir belirleyicisi olarak nasıl işlediğini incelemektedir. Sosyo-ekolojik sistemler yaklaşımıyla, kentin tarihsel gelişimi, yerleşim morfolojisi ve özellikle sosyal refah ile mekânsal örgütlenmeyi şekillendiren vakıf–imaret sistemi analiz edilmiştir. Bursa’nın topoğrafyaya uyumlu kent formu, güçlü kentsel–kırsal ilişkileri ve köklü topluluk ağları, yangınlar, depremler ve sosyo-politik kesintiler gibi şoklara karşı uyum ve toparlanma kapasitesini artırmıştır. Bulgular, kültürel mirasın pasif bir geçmiş unsuru değil, sosyal bütünlük, yönetim ve çevresel uyum sağlayan aktif bir dirençlilik kaynağı olduğunu göstermektedir. Çalışma, Anadolu–Türk kent yapısının günümüz sürdürülebilir ve dirençli şehir planlaması için önemli çıkarımlar sunduğunu ortaya koymaktadır.

Anahtar kelimeler: Kentsel dirençlilik, kültürel miras, vakıf–imaret sistemi, sosyo-ekolojik sistemler.

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1. Introduction

Urban resilience has recently emerged as a key concept in urban and architectural studies and policies. The increase in global urbanization and the growing occurrence of environmental, economic, and social problems are the leading causes of this phenomenon in literature. Resilience is defined as the quality of a system to absorb disturbances and reorganize while retaining essentially the same function, structure, and feedback (Holling, 1973). The concept of the ecosystem was first formally defined by Holling & Goldberg (1971) subsequently advanced this ecological framing by linking ecosystem dynamics with planning and human systems. Folke et al. (2002) extended and transformed the term into socio-ecological systems (SES). They provided a framework for understanding cities as complex adaptive systems. The SES perspective sees resilience as more than just resistance to shocks. To them, resilience also includes the ability to learn, self-organize, and adapt to change.

The concept of resilience has gradually become a focus of research and policy across various domains, including disaster risk reduction, climate adaptation, infrastructure planning, and urban governance. Early foundations of this perspective can be found in the work of Jane Jacobs (1960), who portrayed cities as complex and evolving systems shaped by everyday human practices, social diversity, and self-organization. These insights align closely with the understanding of resilience in contemporary urban studies.

During the 1990s, growing environmental pressures and socioeconomic uncertainties facing cities brought resilience to the forefront of urban management discussions (Tobin, 1999). This momentum was further strengthened in the early 2000s through ICLEI's "Resilient Cities" initiative, which played a crucial role in integrating resilience into global urban policy frameworks. Since then, the concept has expanded rapidly as an interdisciplinary field of inquiry, drawing sustained attention from scholars working at the intersection of urban planning, sustainability, and governance (Ahern, 2011; Albers & Deppisch, 2013; Chelleri & Olazabal, 2012; Motesharrei et al., 2016; Satterthwaite, 2013).

In contemporary scholarship, urban resilience is widely understood as a multidimensional concept. Ribeiro & Gonçalves (2019) describe resilience through physical, natural, economic, institutional, and social domains, highlighting key attributes such as redundancy, robustness, adaptability, diversity, inclusion, ingenuity, and integration. Building on this framework, subsequent studies have further elaborated these dimensions across different urban contexts.

For instance, Godschalk (2003) focused on resilience in relation to urban hazard mitigation, while Allan & Bryant (2011) framed resilience as a guiding approach for post-disaster urbanism. Other scholars have examined resilience through the lenses of climate adaptation (Kim & Lim, 2016), sustainability and risk management (McLellan et al., 2012), and strategies for managing climate uncertainty (Wardekker et al., 2010). More recently, resilience principles have also been incorporated into urban design theory and practice (Lak et al., 2020; Yang & Quan, 2016).

Among these contributions, Meerow et al. (2016) offered one of the most comprehensive definitions, conceptualizing urban resilience as the capacity of socio-ecological and socio-technical systems to withstand disturbances and to maintain or rapidly recover their desired functions.

Recent studies have emphasized that natural and cultural heritage are active and dynamic components of urban resilience. UNESCO's Historic Urban Landscape (HUL) Recommendation and the Sendai Framework for Disaster Risk Reduction recognized heritage as a strategic asset that strengthens adaptive capacity, social cohesion, disaster memory, and place-based identity. Continuity, redundancy, and shared knowledge are key for resilience. Cities get these from long-used street patterns. They also come from cultural institutions and local ecological ties. Heritage-based urban forms in Anatolia and Turkey offer a clear way to study this. These rooted urban forms support prosperity and strengthen local governance. They raise a city's ability to absorb shocks, adapt and recover. Integrating heritage values into resilience assessments is vital. This helps make urban plans that fit the local context, include diverse groups and last.

Institutions have shaped global debates. Between 2013 and 2019, the Rockefeller Foundation ran 100 Resilient Cities (100RC). That program began on the global resilience agenda. It defined urban resilience as the ability to "survive, adapt, and thrive" in the face of shocks and long-term stresses. The Resilient Cities Network (R-Cities) continues its work. It supports resilience strategies in more than 100 cities. The City Resilience Index (CRI) was developed in collaboration with the Rockefeller Foundation and Arup. It turns the resilience idea into measurable urban functions and indicators.

These functions are grouped into four dimensions:

- (1) Health and Well-being,
- (2) Economy and Society,
- (3) Infrastructure and Environment,
- (4) Leadership and Strategy (Croese et al., 2020).

These dimensions describe a resilient city. It supports prosperity and fairness. It also strengthens environmental and economic security. Governance should be strategic, inclusive, and adaptable (Sanchez et al., 2018; Wang et al., 2020).

Many studies cover resilient cities. Researchers have not studied how social systems and institutions helped old towns survive. They also helped those cities change over the centuries. Many old cities employed basic methods to mitigate risk, manage resources, and organize communities long before modern planning emerged. Learning these historical practices can guide today's resilience strategies.

Anatolian-Turkish cities show long-term resilience. Nomadic traditions, Islamic ideas about space, and local geography shaped them. Many scholars make this point. They include Tanyeli (1986), Özcan (2005; 2010), Özcan & Yenen (2010), Kuban (1956), and Yenen (1992; 1999). Demonstrate that the formation of Anatolian-Turkish cities cannot be fully understood through traditional models of Middle Eastern or Central Asian urban development. Foundation and imaret systems created distinct spatial, social, and institutional forms. This occurred between the 11th and 15th centuries. These systems provided public services, including schools, healthcare, food, water, lodging, and markets. Autonomous charitable foundations funded and provided these services (Barkan 1962–63; Akozan 1969). The foundation-imaret helped economic stability, social welfare, and the cities' ability to adapt. It was a key part of urban resilience.

The aim of this study is to explore the links between the growth of Anatolian-Turkish cities and urban resilience. Bursa serves as a case study. The research draws lessons from early Ottoman urbanism on achieving equal and sustainable resilience. It also highlights community-based practices. Cities with natural and cultural heritage can use these lessons to guide their resilience plans.

2. Materials and Methods

The paper uses historical study and interviews. It explains how cities in Anatolia and Turkey evolved in their social life and physical form (Figure 1). Bursa is a prominent example. These changes relate to urban resilience. Resilience is the long-term ability to adapt to changes in space and how people organize. We use history and qualitative methods. They show the institutions and physical forces that shaped early Ottoman cities. The study treats cultural and natural heritage as active parts of resilience, not passive remains. This aligns with UNESCO's Historic Urban Landscape and similar concepts.

The method combines studying past cities, examining old documents, and connecting traditional urban systems with modern resilience strategies. The research employs a thorough review of historical sources, articles, and records regarding Ottoman city growth. Ottoman urban development. Significant historical resources consist of the seminal works of Tanyeli (1986) on the evolution of Anatolian-Turkish cities; studies by Özcan (2005; 2010) and Özcan & Yenen (2010) on Seljuk and early Turkish urban models; Yenen's (1992; 1999) examinations of the socio-religious and institutional structures of early Ottoman cities; and Kuban's (1956) and Barkan's (1962–63) analyses of the waqf–imaret system and its impacts on settlement formation. These works offer valuable insights into the physical structure of the Turkish city, the interplay between nomadic and sedentary dynamics, and the effect of Byzantine urban heritage. The historical urban development of Bursa has been analyzed in detail by Pancaroğlu (1995), Kuran (1996), Çağaptay (2011), and Kastritsis (2022), as well as through contemporary

documentation, including the Bursa and Cumalıkızık Management Plan (Bursa UNESCO Site Management Authority, 2012).



Figure 1. Location of Bursa (adapted from Google Earth, 2025)

In parallel with historical literature, the study is anchored in the conceptual frameworks of resilience and socio-ecological systems. Foundational works by Holling (1973), Folke et al. (2002), Folke (2006), Gunderson & Holling (2002), and Feliciotti et al. (2018) inform the theoretical perspective adopted in this study. Contemporary urban resilience studies, including Ahern (2011), Chelleri & Olazabal (2012), Motesharrei et al. (2016), Satterthwaite (2013), Sanchez et al. (2018), Lak et al. (2020), and Meerow et al. (2016), provide a multifaceted understanding of resilience. Ribeiro & Gonçalves (2019), Allan & Bryant (2011), Kim & Lim (2016), and Wardekker et al. (2010) argue that reading resilience can be understood as a set of traits within urban systems. Godschalk (2003) and Spaans & Waterhout (2017) make similar points. Policy frameworks give clear measures. The City Resilience Index, developed by Arup and the Rockefeller Foundation (City Resilience Index, 2014), is one example. The 100 Resilient Cities initiative is another. The Resilient Cities Network (2023) is one more. The UN-Habitat World Cities Report (2022) is another. These measures can be used to judge Bursa's traditional systems.

Accordingly, the methodological design is based on an analytical relationship between the socio-spatial formation mechanisms of Anatolian-Turkish cities and the multidimensional structure of urban resilience. An interpretive historical analysis synthesizes data and insights of these sources. First, the study reconstructs the development trajectory of Anatolian-Turkish cities, focusing on the Seljuk, Beylik, and Early Ottoman periods. Second, Bursa's urban formation—structured around the citadel (hisar), the sequential establishment of imaret/külliye complexes, and topography-driven linear development—is analysed in detail. Third—the imaret system is examined to understand how it contributed to shaping socio-economic stability, public welfare, infrastructure provision, and spatial expansion. Fourth, historical disasters such as fires and earthquakes are reviewed using documented accounts to assess Bursa's historic recovery capacity (e.g., Özcan, 2005; Özcan, 2010; Pancaroğlu, 1995; Kuban, 1956).

Finally, the findings from the historical-urban analysis are mapped onto the four core dimensions of resilience defined by the City Resilience Index: (1) health and wellbeing, (2) economy and society, (3) infrastructure and environment, and (4) leadership and strategy. This methodological step allows the study to evaluate how Bursa's traditional socio-spatial systems (such as waqf-funded public services, imaret-based community support, and külliye-directed spatial expansion) constitute mechanisms of resilience parallel to contemporary frameworks.

In summary, this methodological approach provides the study with a connection between historical urban practices and modern resilience theory, demonstrating that traditional Anatolian-Turkish cities, such as Bursa, developed embedded adaptive capacities long before resilience became a formalized academic and policy concept. The research makes conceptual and empirical contributions to understanding resilience from a heritage-based urban perspective through this qualitatively historically grounded method.

3. Findings and Discussion

The findings of this paper show that the traditional Anatolian-Turkish city model, shaped by the cultural synthesis of nomadic Turkmen traditions, Islamic socio-spatial norms, and Byzantine urban heritage, contains deeply embedded mechanisms of urban resilience. Bursa, as the first capital of the Ottoman Empire, represents the most complete and analytically important example of this model. Its socio-spatial organization, institutional structures, and ability to recover from successive disasters reveal how pre-modern cities developed adaptive systems that closely parallel contemporary resilience frameworks.

The origins of this resilient urban model emerged between the 11th and 15th centuries, when migrating Turkmen communities encountered Byzantine settlement patterns across Anatolia. As Tanyeli (1986) notes, Anatolian-Turkish cities cannot be understood through classical Middle Eastern or Central Asian typologies; instead, they developed as hybrid forms shaped by the coexistence of nomadic mobility and sedentary settlement culture. Studies by Özcan (2005; 2010) and Özcan & Yenen (2010) further demonstrate that the Seljuk urban tradition combined Iranian–Central Asian principles with Anatolian–Byzantine spatial logic, resulting in a diversified range of settlement types, including open, closed, and frontier cities. Kuban (1956) and Yenen (1992; 1999) emphasize that this hybridity continued into the Early Ottoman period, where urban morphology evolved around administrative centers, communal facilities, and organically developed residential quarters, forming a flexible and adaptive socio-spatial structure.

Bursa—conquered in 1326 by Orhan Bey and later the first capital of the Ottoman Empire—represents the most complete and influential example of the Anatolian-Turkish city model. Its urban morphology developed through a sequence of imaret/külliye complexes, each established by succeeding sultans (Orhan Gazi, Murad I, Bayezid I, Mehmed I, and Murad II), forming a spatial choreography that extended the city along the foothills of Uludağ (Pancaroglu, 1995; Kuran, 1996; Çağaptay, 2011). This process combined topographical sensitivity, urban–rural integration, and social infrastructure provision. Kastritsis (2022) emphasizes Bursa’s role as a prototype for later Ottoman capitals, while the Bursa UNESCO Site Management Authority (2012) documents its enduring cultural and urban significance within the framework of UNESCO.

Throughout its history, Bursa endured numerous shocks—including major fires, social disruptions, and particularly the destructive twin earthquakes of 1855—and yet successfully rebuilt its socio-spatial fabric each time (Özcan, 2005; Özcan, 2010; Kuran, 1996). The ability of waqfs, guilds, and local communities to mobilize resources and repair essential infrastructure demonstrates a deeply embedded resilience supported by traditional institutions.

The case of Bursa exemplifies these dynamics with particular clarity. After its conquest in 1326, the city expanded beyond the fortified Byzantine citadel and developed linearly along the foothills of Uludağ. The most defining driver of this expansion was the sequential establishment of imaret/külliye complexes by successive Ottoman rulers, including Orhan Gazi, Murad I, Bayezid I, Mehmed I, and Murad II. Research by Pancaroglu (1995), Kuran (1996), and Çağaptay (2011) demonstrates that these külliyes were deliberately positioned on topographically strategic slopes, creating a spatial choreography that directed the city’s growth outward from the citadel. Each complex served as a multifunctional nucleus, integrating religious, educational, health, social, and commercial functions. Consequently, the külliye network became the primary structuring element of Bursa’s urban morphology, shaping its physical form, reinforcing its social fabric, and maintaining strong relationships between urban and rural zones. Kastritsis (2022) highlights that this model later became the prototype for subsequent Ottoman capitals (See Figure 2).

At the center of this formation lay the waqf–imaret system, which functioned as a socio-economic engine and resilience mechanism. Waqfs financed an extensive range of public facilities, including mosques, madrasas, libraries, public kitchens, baths, fountains, bridges, roads, and commercial structures, ensuring the equitable and sustained provision of essential services (Barkan, 1962–63; Akozan, 1969). Imarets played a particularly critical role by supplying food, healthcare, shelter, and education, thereby enhancing the well-being of both urban and rural communities. Commercial structures, such as bazaars, khans, and storage depots, generated revenue for waqfs, supporting their long-term financial continuity. This circular socio-economic ecosystem reinforced artisan guilds, stabilized production networks, strengthened social cohesion, and reduced vulnerability—functions that correspond directly to the “economy and society” dimension of the City Resilience Index (See Figure 2).

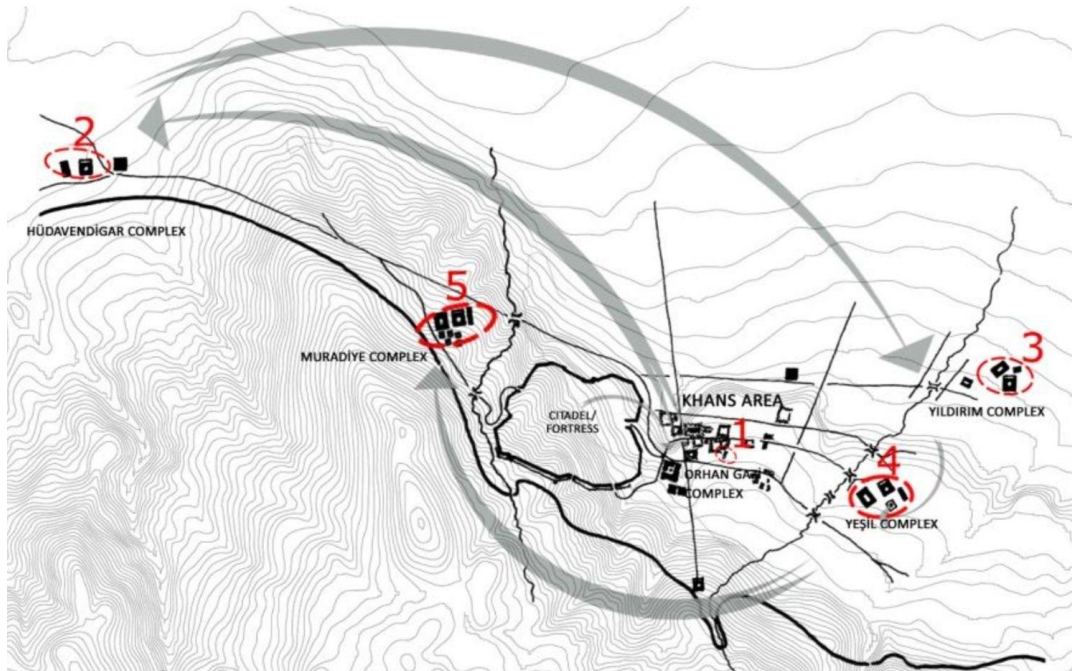


Figure 2. Location of Sultan Imarets and the Citadel (adapted from Bursa UNESCO Site Management Authority, 2013)

The waqf system’s investment in water infrastructure, bridges, and roads strengthened Bursa’s physical resilience by improving connectivity, redundancy, and environmental adaptation. The strategic siting of külliyes reflects a form of implicit long-term planning that aligns with what contemporary resilience frameworks classify under “leadership and strategy.” Waqfs, operating with administrative autonomy and intergenerational continuity, embodied stable governance structures capable of maintaining services despite political or economic fluctuations. In this sense, the waqf–imaret system functioned simultaneously as an infrastructural, social, financial, and administrative institution of resilience.

Bursa’s historical responses to fires and earthquakes further reveal its adaptive capacity. The city endured destructive fires—including the 1402 Mongol fire, the 1413 Karamanoğlu fire, and numerous fires between 1491 and 1764—as well as the catastrophic twin earthquakes of 1855. The prevalence of wooden housing contributed to the rapid spread of fire, devastating commercial and residential areas. The 1855 earthquakes caused severe damage to major religious complexes, mausoleums, public buildings, artisan shops, and hundreds of homes. Yet the city rebuilt each time through collective mobilization involving waqfs, guilds, wealthy citizens, and state authorities. Waqfs financed the repair of mosques, baths, bridges, and educational structures; guilds supported artisans; and aid was distributed to affected populations without ethnic or religious discrimination. These patterns demonstrate a deeply embedded resilience based on social solidarity, institutional continuity, and shared responsibility (See Figure 3).

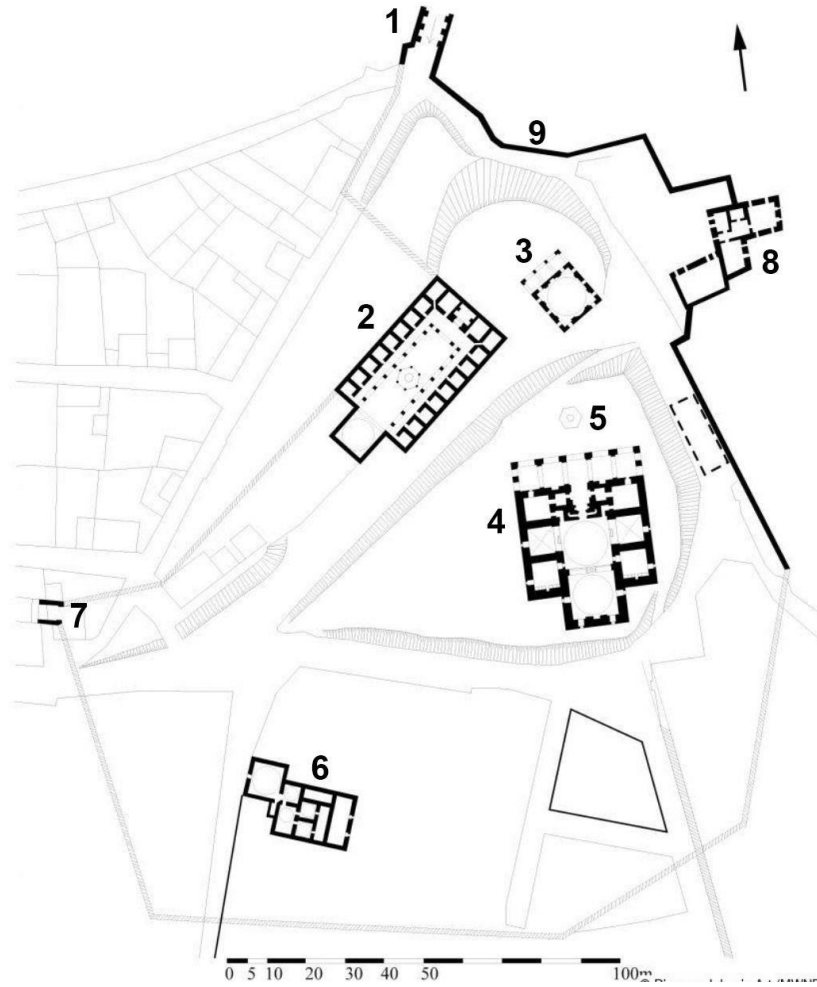


Figure 3. Beyazid I 's Imaret, Including: (1) Main Gate, (2) Higher School (Medrese), (3) Tomb (Türbe), (4) Mosque (Cami), (5) Fountain (Çeşme), (6) Bath (Hamam), (7) Secondary Gate, (8) Mansion (Kasr), (9) Walls (Sur) (Adapted from Gabriel, 2008)

The analysis of these historical processes identifies several interrelated resilience mechanisms: the capacity to reorganize after disruptions, the ability to mobilize resources collectively, the presence of autonomous institutions capable of long-term planning, and a social system grounded in cooperation, equity, and community welfare. These mechanisms align closely with socio-ecological systems theory (Folke et al. 2002; Folke 2006) and with the multidimensional urban resilience attributes described by Meerow et al. (2016), Ribeiro & Gonçalves (2019), and Croese et al. (2020).

When evaluated using the four dimensions of the City Resilience Index, Bursa's traditional urban system demonstrates resilience in all categories. Its imarets contributed to health and well-being through social welfare provision; the waqf-supported production and distribution networks strengthened the economy and society; its topography-sensitive urban form and distributed külliye network enhanced infrastructural and environmental robustness; and the administrative continuity of waqfs, combined with the strategic placement of külliyes, reflects effective leadership and long-term vision. Taken together, these findings show that Bursa offers a rich historical example of how pre-modern urban systems integrated spatial planning, social welfare, environmental adaptation, and community-based governance into a coherent and resilient urban structure.

4. Conclusion and Suggestions

This study demonstrates that the traditional Anatolian–Turkish city model—most clearly exemplified by Bursa—embodies an inherently resilient socio-spatial structure shaped through cultural continuity, institutional depth, and adaptive mechanisms of urban development. The historical analysis reveals that, long before resilience became a formalized concept in contemporary planning and policy, Anatolian–Turkish cities had already developed sophisticated systems capable of sustaining social welfare, economic stability, environmental balance, and long-term governance. Bursa’s formation—emerging from the interplay of nomadic heritage, Islamic socio-cultural norms, Byzantine legacies, and early Ottoman administrative principles—constitutes a compelling example of how resilience can evolve organically through cultural, institutional, and spatial processes across centuries.

Central to this embedded resilience was the waqf–imaret system, which provided the institutional architecture through which public services, socio-economic continuity, and urban welfare were maintained. Waqfs financed and preserved essential infrastructure, including water networks, bridges, baths, libraries, schools, mosques, and public kitchens. Imarets delivered daily services in nutrition, health, shelter, and education. This integrated system ensured equitable access to basic needs, strengthened social cohesion, reduced vulnerability, and created a stable administrative foundation. The financial autonomy and intergenerational continuity of waqfs demonstrate how Ottoman-era institutions fulfilled roles analogous to those of present-day models of resilience governance.

Bursa’s spatial development further reinforces this historical resilience. The sequential construction of imaret/külliye complexes on strategically selected hillsides generated a multicentric and topography-sensitive urban structure. Each külliye catalyzed the emergence of new residential, commercial, and social clusters, creating a flexible spatial framework that could accommodate population growth, economic transformation, and environmental disturbances. The city’s linear development along the foothills of Uludağ reveals a form of long-term ecological adaptation that aligns closely with contemporary principles of sustainability and resilience.

The city’s responses to fires and earthquakes—most notably the devastating earthquakes of 1855—demonstrate that resilience was not episodic but structural. Reconstruction efforts were mobilized rapidly through waqfs, guilds, notables, and state actors. Public buildings, commercial spaces, baths, mosques, and bridges were repaired through collective resource mobilization, while artisans received financial support from guilds and charitable networks. The equitable distribution of aid across religious and ethnic communities strengthened social solidarity during periods of crisis. These historical patterns underscore that adaptive capacity in Bursa stemmed from deeply embedded socio-institutional structures rather than ad hoc interventions.

When evaluated through the four dimensions of the City Resilience Index (CRI), Bursa’s historical urban system aligns strongly with contemporary conceptualizations of resilience:

- *Health and Wellbeing*: ensured through the daily social services of imarets, including food, hygiene, health, and education.
- *Economy and Society*: supported by waqf-funded livelihoods, artisan guilds, charitable networks, and balanced urban–rural production systems.
- *Infrastructure and Environment*: enabled by sustainable public works, long-lasting water and transportation networks, and topography-sensitive growth patterns.
- *Leadership and Strategy*: reflected in the administrative continuity of waqfs, strategic spatial logic of külliyes, and long-term decision-making embedded in Ottoman governance culture.

Together, these findings demonstrate that the resilience of Anatolian and Turkish cities was deeply institutionalized, spatially encoded, and socially internalized. Bursa exemplifies how a town can remain historically grounded while simultaneously exhibiting adaptive flexibility, offering an important reference point for contemporary discussions on sustainable and resilient urbanism.

Suggestions for Contemporary Urban Policy and Planning

1. Integrating Social Infrastructure into Resilience Strategies
The waqf–imaret system shows that social welfare must be considered a foundational component of resilience. Modern planning should prioritize equitable access to essential services, including food, healthcare, education, and shelter—especially for vulnerable groups.
2. Reviving Community-Based Institutional Mechanisms
The participatory, autonomous, and continuous nature of waqfs highlights the value of decentralized governance. Contemporary cities may benefit from localized, community-driven administrative and financial structures that strengthen institutional redundancy and enhance public participation.
3. Strengthening Urban–Rural Linkages
Bursa’s strong relationship with its rural hinterland ensured food security, economic stability, and ecological balance. Resilience strategies should incorporate integrated regional planning, supply chains, and environmental networks connecting urban and rural areas.
4. Using Historical Urban Morphology as a Guide for Sustainable Development
Külliye-based multicentric development and topography-sensitive spatial expansion provide insights for designing polycentric, compact, and environmentally responsive contemporary cities.
5. Institutionalizing Cultural Heritage within Resilience Agendas
Bursa demonstrates that heritage is not merely symbolic but functionally contributes to adaptive capacity and social cohesion. Urban policy should incorporate cultural heritage as an active tool for resilience building.
6. Developing Long-Term, Multi-Scalar Resilience Frameworks
Just as waqfs provide intergenerational continuity, contemporary planning must adopt long-term, multi-scalar frameworks that address environmental, social, economic, and infrastructural resilience beyond short political cycles.

In conclusion, Bursa illustrates that resilience is not solely a contemporary urban objective but a deeply rooted historical quality shaped through institutional innovation, socio-spatial cohesion, and cultural continuity. The Anatolian–Turkish city model demonstrates that effective resilience arises when urban form, social welfare, economic systems, environmental adaptation, and governance operate in holistic alignment. As contemporary cities face increasing pressures—from climate change to socio-economic fragmentation—re-examining the embedded urban practices of Bursa provide valuable insights for developing sustainable, equitable, and resilient cities of the future.

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Author Contribution and Conflict of Interest Disclosure Information

All authors contributed equally to the article. There is no conflict of interest.

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