Design of the built environment strongly influences our quality of life. The pattern of development across a city, county, and region; the configuration of neighborhoods and districts; and the architecture of individual buildings collectively shape our perception of places and influence how we choose to travel, recreate and socialize. This chapter focuses on the urban design principles applicable to blocks and individual development sites, the architecture of public and private buildings, the landscape of plazas and public spaces, and elements of street design.
The Wedges and Corridors Plan envisioned a variety of living environments and encouraged “imaginative urban design” to avoid sterile suburban sprawl. Unfortunately, design approaches intended to serve a range of functional objectives and aesthetic aspirations soon succumbed to an emphasis on the convenience of driving and the assumption that different land uses, building types, and even lot sizes should be separated. Over time, these priorities produced design approaches that failed to create quality places with lasting value.

Despite the 1964 plan’s recognition of the importance of urban design, a continued emphasis on facilitating driving has created unattractive and unsafe walking environments, even in areas with significant investments in transit infrastructure.

Design serves functional and aesthetic purposes. Functional considerations dictate how structures are built and how they connect to the sidewalks, streets and spaces around them to facilitate movement, social interaction, and physical activity. Aesthetic aspects of design, along with the integration of arts and cultural elements, influence how streets, buildings and spaces look and feel to create beauty and a sense of place. Arts and cultural practices touch every corner of life and are among the most visible indicators of the social values and diversity of a place. Public art and cultural institutions highlight new perspectives, preserve local history and traditions, deepen our understanding of others, and expand our imaginations.
Buildings designed to accommodate single uses, while less expensive when considered in isolation, created an inventory of structures that are inflexible and costly to reuse. Malls, office parks, and other large, single-use buildings are difficult to repurpose and the high cost of adapting their layouts to meet new spatial needs due to technological shifts, demographic changes, and market preferences shrinks their useful lives and makes them less sustainable. The consequences of the limited adaptability of our building stock are evident in persistently elevated office vacancy rates accompanied by an acute shortage of housing.

Automobile-oriented design meant that thoughtful site arrangement was subverted by an insistence on the provision of abundant and visually prominent surface parking, with buildings placed in the middle of large asphalt lots or entrances and front doors obscured by driveways and garages. Buildings were disconnected from public spaces and set back from streets. Streets were widened, pushing buildings farther apart and preventing a sense of enclosure, which discouraged walking by making it less convenient and comfortable. Space for sidewalks, seating, and greenery was sacrificed to make more space for parking and roads, shrinking the size and utility of public spaces. Other elements of street design such as lighting and signage were enlarged to make them more visible to motorists passing at high speeds, making streetscapes less engaging to pedestrians and degrading the quality of the public realm.
These problems are every bit as evident in the design of public buildings as in private development. Typical parcel size standards for public buildings such as schools are too large to fit most available sites, limiting the location of new facilities. The shortage of “adequate” sites along with a growing student population leads to a tear-down-and-rebuild approach with larger and larger numbers of students in bigger and bigger buildings. Boundary areas draw students from farther away, leading to the allocation of more space for parking, less walking and bicycling, longer bus rides and drives for parents as well as longer commutes for staff.

Montgomery County’s land use matured over the life of the Wedges and Corridors plan, and as we approach the point where greenfield development opportunities within the growth envelope have been exhausted, a new approach more suited to infill and redevelopment is required. When the subdivision of farmland was the primary strategy for accommodating growth, the focus of land use regulation was on the entitlement process, which allocates development rights and responsibility for the provision of basic infrastructure such as roads and sewer pipes. The form and orientation of buildings to each other and to the public realm were a subsidiary consideration.

Entitlement-centered rules are well-suited to standardized, cookie-cutter subdivisions but poorly adapted to the design of distinctive projects that respond to their surroundings and the needs of increasingly constrained development sites – to say nothing of celebrating local geography, history and culture. We can no longer afford to ignore the attributes of neighborhood and site design that strongly influence perceptions of the quality and potential of a place. Dispersed buildings and sprawling parking lots lead to underbuilt sites that are poorly suited to repositioning, infill, and redevelopment and reduce the utility of investment in parks, transit, and other public amenities and infrastructure.

Entitlement-centered approaches to zoning often result in homogenous communities while form-based regulations can create neighborhoods that are more mixed and celebrate local geography, climate and building traditions.

Infill design standards and colocation strategies for public facilities are needed to create sustainable civic buildings within walking distance of neighborhoods.
Montgomery County has evolved into one of the most diverse jurisdictions in the nation and our arts and culture sector is impressive in its scope and depth. Taken as a whole, the sector would be the sixth-largest employer in the county. While the county makes significant investments in arts and culture, these investments are not always equitably distributed. Emerging organizations that support underserved communities often lack the funding and base of support enjoyed by some of their more established counterparts. Artists and arts organizations cite the lack of affordable living, working, and sales spaces as a major challenge. The field of public art has been expanding to embrace a wider range of approaches including civic and placemaking practices, but the county's art programs lag in its ability to apply these approaches.

In order to maximize the contributions of design, arts, and culture toward creating strong communities with lasting value, the county will pursue the following policies and practices:

- Use design-based tools to create attractive places with lasting value that encourage social interaction and reinforce a sense of place.

  - Use codes, design guidelines, pattern-based zoning, and regulatory tools that focus on the physical forms of buildings, streets, and spaces to ensure development across the county satisfies the following goals through massing, architecture, landscape, and street design:
    - Ensure that all architecture and landscape designs physically define streets and public spaces as places of shared use that engage the pedestrian and are configured to encourage social interaction.
    - Link individual architectural projects seamlessly to their surroundings irrespective of style. Civic buildings and public gathering places must be treated as important sites whose design reinforces community identity and a culture of inclusion and democracy.
    - Design buildings, streets, and parking to prioritize the pedestrian scale and encourage walking and bicycling through smaller blocks, narrower streets, buffered bike lanes and sidewalks. Slow vehicle speeds and minimize surface parking while adequately accommodating automobiles.
    - Accommodate new development with a context sensitive approach to architecture and landscape design that acknowledges neighboring structures, local climate, and topography.
    - Physically integrate government and private development sites into their surrounding neighborhoods such that they welcome the general public and support local economic development by facilitating movement and interaction of people and transfer of ideas and innovation.
    - Preserve, renew, and reuse existing and historic buildings, districts, and landscapes to affirm the continuity and evolution of communities while celebrating local culture and identity.

An expanding public art field and its growing presence in the built environment require new government programs that can support nontraditional and temporary installations and performances.
• Replace vague concepts such as “compatibility” with clear standards for form, site layout, setbacks, architecture, and the location of parking. Adjust rules for “missing middle” housing types such as tiny houses, cottages, courtyard clusters, duplexes, multiplexes, small apartment buildings, shared housing, co-housing and accessory dwelling units (ADUs). Amend land-use, design, and zoning regulations, including the Zoning Ordinance and Subdivision Regulations, to remove regulatory barriers and facilitate development of these housing types.

• Update the zoning code to include basic form-based elements for all zones. Adapt context-sensitive design guidance for all master planning efforts.

Promote design strategies and retrofits to make new and existing buildings more sustainable and resilient to disruption and change.

• Encourage state-of-the-practice sustainability features such as net-zero/ carbon-positive buildings, biophilic design and on-site energy generation for new public buildings and large private developments on sites across the county.

• Promote cost-effective infill and adaptive reuse design strategies to retrofit single-use commercial sites such as retail strips, malls, and office parks into mixed use developments.

• Incentivize the reuse of historic buildings and existing structures to accommodate the evolution of communities, maintain building diversity, preserve naturally occurring affordable space, and retain embodied energy of structures.

• Establish standards for public facilities that align with infill and redevelopment strategies and acknowledge the county’s limited land supply and ambitious climate-action goals.

• Implement policies to ensure that new buildings and parking structures are adaptable to changing technologies and market preferences and are able to mitigate effects of climate change over time.

Support arts and cultural institutions and programming to celebrate our diversity, strengthen pride of place, and make the county more attractive and interesting.

• Create an inclusive arts-and-culture plan that establishes a refreshed vision; sets goals, criteria, and priorities for the county’s support of the arts-and-culture sector; and addresses how the county’s arts and culture resources are allocated.

• Improve access for artists and arts groups to affordable living, working, and presentation spaces with a focus on economic, geographic, and cultural equity.

• Promote public art, cultural spaces, and cultural hubs along corridors and in Complete Communities.

• Eliminate regulatory barriers to live-work spaces, home studies, galleries, and other small-scale art-making and creative businesses.

• Enable all residents to experience public art daily by incorporating it into the design of buildings, streets, infrastructure, and public spaces.

• Use new public facilities to demonstrate principles of architecture as civic art and broader cultural representation.

• Encourage property owners, non-profit organizations, and government agencies to maximize use of parks and public spaces for artistic and cultural programming, activation, and placemaking. Maintain an annual calendar of events varying in scale, time, and location to help guide efforts to improve the reach of diverse programming.

• Partner with agencies to strengthen data collection about investments and better align arts-and-culture related policies with Thrive Montgomery 2050’s goals of economic competitiveness, social equity and environmental resilience.

These policies will ensure that the design of our built environment supports our economic competitiveness. Design-based tools will create attractive buildings, streets, and public spaces that retain greater economic value over time. The thoughtful arrangement of these elements will create places that become destinations for commerce and social activity and add value to their surroundings, encouraging neighboring owners to reinvest in their own properties to match and take advantage of adjacencies. Places designed with pedestrians in mind will lead to more human interaction and facilitate the exchange of ideas, attracting innovative companies and creative professionals. Comfortable, tree-lined streets will meet market demand for walkable places.
Sustainable design strategies for new construction and retrofits will enhance the environmental performance of buildings and neighborhoods. Promoting sustainability features in new public and private buildings will reduce the ecological impact of growth. Encouraging adaptive reuse of existing buildings and incentivizing cost-effective retrofits of single-use sites into mixed-use projects will reduce energy consumption and greenhouse gas emissions. Compact site standards and colocation of public facilities along with state-of-the-practice sustainability features will help achieve ambitious climate action goals and make more efficient use of public land.
Design codes based on physical form will serve as predictable guides for change, address community concerns over accommodating growth, and illustrate hard-to-define concepts such as “character” and “compatibility.” A shift away from these kinds of vague standards will help make regulatory decisions more equitable by applying more objective criteria in evaluating development proposals and their relationship to their surroundings. Clear standards governing acceptable form will discourage amorphous claims about the “incompatibility” of different housing types and neighborhood-serving retail, facilitating the creation of mixed-income neighborhoods where essential services are within walking distance of most residences.

Clear form-based design standards that are not overly prescriptive allow the mixing of uses, building types and architectural styles while ensuring a consistent quality of streets and public spaces.

Figure 36: Typical street design guidelines

Figure 37: Potential redevelopment of a typical suburban office park.

Diagram shows potential infill, adaptive reuse, and partial redevelopment of a typical office park that creates smaller development blocks connected by a complete street network and varying open spaces.
A focus on form and adaptability rather than use and density in regulatory systems will provide flexibility to respond to changing market conditions and demographic trends and adapt to disruptive technological and environmental change. Designing buildings and parking with adaptability in mind will prolong the useful life of structures and reduce scrape-and-replace development practices, conserving energy embodied in existing structures.

Highly skilled workers in creative or knowledge-intensive occupations are particularly sensitive to quality of place, which includes an open and tolerant attitude toward different people, cultures, and lifestyles along with attention to the built and natural environment and excellent public services. A desire for human interaction cuts across lines of age, race and ethnicity, and class and is critical to the happiness of individuals as well as the collective well-being of a community. Encouraging different kinds of people to interact in public spaces is important to building a sense of community with shared interests and values. Arts and culture spaces and programming can help us better understand and appreciate each other, strengthening support for diversity and inclusion and building trust.

In many cases the problem is not that there is insufficient public space but that it fails to draw people in and use it. For example, this shot of the 100 percent corner in downtown Bethesda is quite elaborately designed and typically not well utilized.
In assessing proposals related to design, arts, and culture and measuring the success or failure of the approaches recommended in this plan, relevant measures may include:

- Public-use space per capita
- Pedestrian traffic in downtowns and suburban activity centers
- Visitation and time spent in select urban, suburban, and rural gathering places
- Number and spatial distribution of public art installations, temporary and permanent
- Number and spatial distribution of publicly funded community events such as festivals, street fairs, sporting tournaments, etc.
- Number, use type, and square footage of businesses classified as cultural categories by the North American Industry Classification System (NAICS)
- Average rent, total square footage, and spatial distribution of available art/creative/maker-space
- County budget allocated to arts and cultural agencies and programming and local spending by patrons of arts and cultural events
- Retention and growth of arts- and culture-related businesses
- Number and spatial distribution of cultural heritage and historic designations
- Number of buildings with performance-based energy certification
- Number of adaptively reused, retrofitted, and repositioned structures and structures designed with flexibility for future uses and/or adaptability in mind

Affordable living, administrative, working, and presentation spaces for artists throughout the county will help to showcase our diversity and attract and retain cultural uses and arts-related businesses. Strategic investments in these kinds of spaces can increase the economic contribution of arts and culture over the long run by reinforcing the role of the sector in building centers of social gathering and cultural events which in turn attract other business and investment.

Artistic and cultural programming in our public spaces – with a calendar of events varying in scale, time, and location – will help improve the equitable distribution of resources to celebrate our cultural diversity. By focusing investments in public art, cultural spaces, and cultural hubs along corridors and in Complete Communities we can make these places welcoming and attractive to people from different backgrounds. Support for arts and culture can provide creative tools to share untold stories, encourage empathy, give voice to diverse points of view, and foster civic dialogue and participation.

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