11.4.9 Building on Brownfield Sites

2023–2024

Build on brownfield sites, where possible.

AASTMT is at the forefront of driving sustainable urban development and responsible land use, directly addressing the principles of "Building on brownfield sites, where possible." AASTMT has demonstrated a profound commitment to transforming underutilized, derelict, or post-industrial urban land into vibrant, productive community assets. These initiatives showcase a holistic approach that integrates advanced research, practical student projects, and community engagement to build the resilient, inclusive smart cities of tomorrow.

The Annual "Urban Regeneration & Smart Futures" Symposium

AASTMT's College of Engineering and Technology hosted its annual symposium focusing on the critical challenges of modern urban planning. A central theme 2023-2024 was the strategic redevelopment of post-industrial zones within major cities. The event brought together experts to discuss innovative techniques for site remediation, dealing with legacy solid waste and pollution, and converting these areas into mixed-use developments.

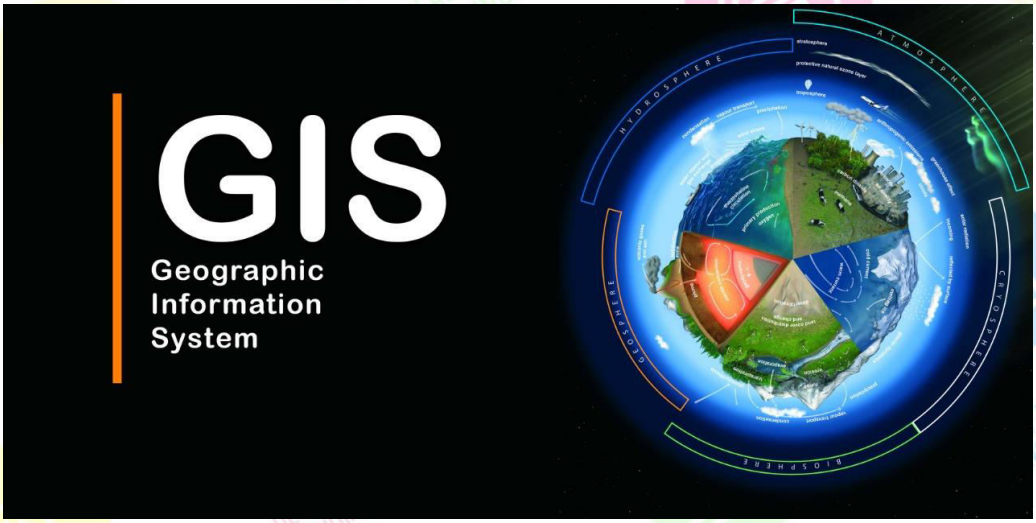
The symposium emphasized how revitalizing brownfield sites is a powerful tool for curbing urban sprawl, reducing pressure on virgin land, and enhancing the existing road network and public transport infrastructure. Keynote speakers presented case studies on projects that successfully integrated new housing developments with public parks and commercial spaces, turning neglected areas into hubs of community life and economic activity. This initiative directly supports the core of sustainable urbanization.

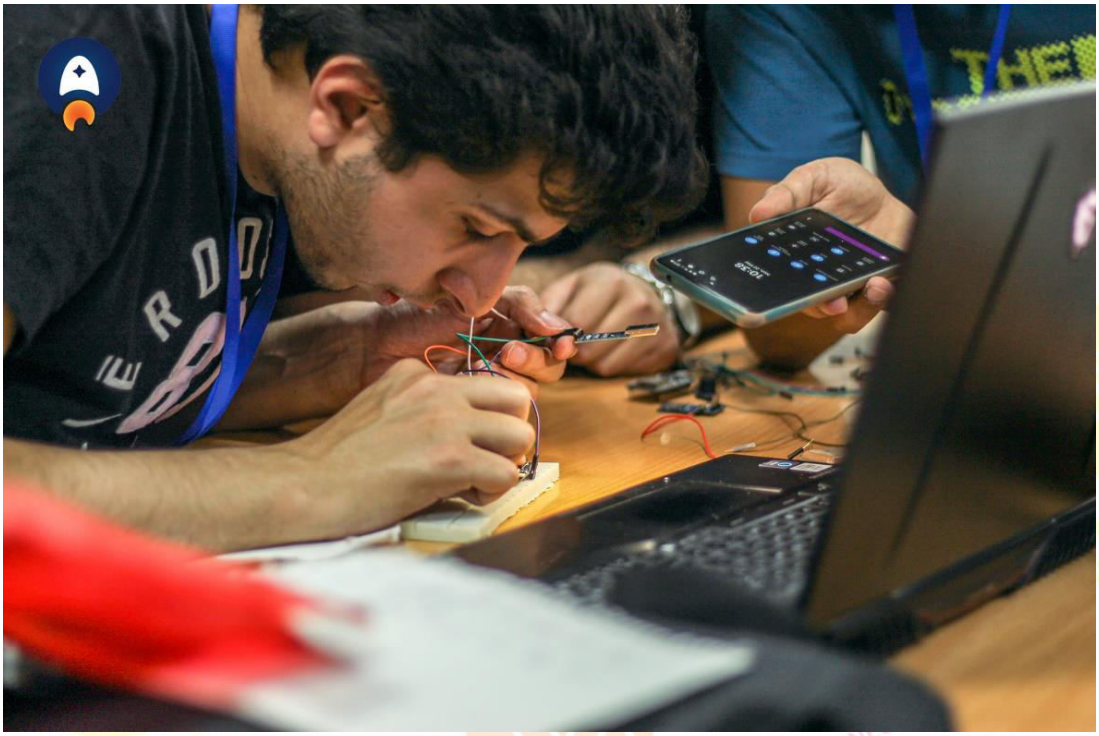
The Annual "Urban Regeneration & Smart Futures" Symposium on AASTMT webpage

Workshop on "GIS and Remote Sensing for Sustainable Site Selection"

In collaboration with international partners, AASTMT conducted a professional workshop for municipal planners and engineers on using Geographic Information Systems (GIS) to identify and prioritize brownfield sites for redevelopment. The training focused on analyzing historical land use, environmental data, and proximity to existing infrastructure like rail transit and utilities.

This initiative provides public and private sector professionals with the tools to make data-driven decisions, ensuring that redevelopment efforts are targeted where they can deliver the most significant social, economic, and environmental benefits. This capacity-building effort is crucial for implementing a systematic approach to urban regeneration and making the goal of building on brownfield sites a scalable reality for the entire region.





Workshop on "GIS and Remote Sensing for Sustainable Site Selection" on AASTMT webpage
Workshop on "GIS and Remote Sensing for Sustainable Site Selection" on facebook
Workshop on "GIS and Remote Sensing for Sustainable Site Selection" on linkedin

Transforming Underutilized Land: AASTMT's Sustainable Campus Expansion

The institutional strategy of AASTMT demonstrates a profound commitment to sustainable urban development, which is operationalized through a policy of urban regeneration centered on brownfield site selection. This approach is a core tenet of the institution's comprehensive urban planning and city planning framework, showcasing a deliberate choice to repurpose existing urban land rather than contribute to unchecked urbanization. This policy inherently addresses legacy environmental challenges, including the remediation of land affected by pollution, solid waste, and historical sewage systems, thereby restoring the natural land cover.

Furthermore, the institution's development model is predicated on seamless integration within the broader city infrastructure. Site selection criteria rigorously evaluate connectivity to the existing road network and access to public transportation and public transport systems, promoting sustainable commuting and contributing to the creation of smart cities. This holistic planning extends to enhancing the overall urban landscape through the creation of accessible public spaces, while also considering the positive impact on the local housing market.

A critical component of this strategy is its focus on resilience and disaster prevention. The evaluation process for each site includes a thorough assessment of risks associated with natural disasters, such as vulnerability to floods and seismic activity related to earthquakes, ensuring that all new construction contributes to a safer and more resilient urban environment. Moreover, the policy mandates the preservation and thoughtful integration of

any on-site cultural heritage and historical buildings, underscoring a commitment to maintaining the unique character of the community. This integrated methodology confirms that AASTMT's approach to campus development is a direct and impactful contribution to building inclusive, safe, resilient, and sustainable communities in alignment with SDG 11.

Transforming Underutilized Land: AASTMT's Sustainable Campus Expansion on AASTMT webpage
Transforming Underutilized Land: AASTMT's Sustainable Campus Expansion