



## Infrastructure Asset Recycling & Conversion: Adaptive Reuse, Texas

Age, wear and tear, and outdatedness play a role in virtually every aspect of the real world, even properties like equipment, buildings, and public assets. Whether tangible or intangible, a public asset includes but is not limited to physical property, shares, and proprietary rights and land owned by a government or a procuring and disposing entity. Like any worn-down or unproductive property that does not receive attention, a public asset can eventually succumb to natural depreciation, requiring repair and losing its value, essentially becoming inefficient and unsafe for further use.

With local government budgets stretched to their limits, thousands of public assets across the country have fallen victim to dilapidation and disrepair over the past couple of decades, accumulating significant maintenance costs while occupying precious urban land space. In response, there has been a growing movement to create an afterlife for these assets, providing them with an alternate purpose. This sweeping trend of adaptive reuse has garnered significant attention and is leading to some progressive, visionary partnerships and projects that benefit not only local governments but also local businesses, municipal agencies, and communities as a whole. The result of salvaging these non-revenue-generating assets is that the upgraded and enhanced public assets are often repurposed to deliver revenue potential or some sort of citizen and taxpayer benefits.

### **What Is Adaptive Reuse?**

Public officials realize the need to be creative when expanding its urban landscape when it comes to meeting the demands of their cities' growing commercial and residential needs. City governments are discovering innovative new ways to repurpose old, unwieldy, and abandoned public assets. Adaptive reuse refers to the process of changing disused, ineffective, or unproductive infrastructure assets into a new asset that can be used for a different purpose for innovation and growth. In some scenarios, vacant properties are seen as a burden on communities, as they lead to increased crime (from vandalism and by providing allocation for criminal activity), pose fire hazards, and damages and penalties that fall on the taxpayers. Adaptive reuse has become an effective strategy for optimizing the operational and commercial performance of assets that have already been built. After structures become disused or abandoned, nonfunctional for an extended period of time, this process can increase the value of public assets, generating more economic vitality, and decreasing taxpayer costs while maintaining its resources and retaining its history and culture.

This type of revitalization is not specific to buildings of historic significance or nostalgic charm. However, as real estate needs change, and expectations for built environments evolve, the adaptive reuse model serves as an imaginative tool to establish city infrastructure without destroying structures of the past. Furthermore, adaptive reuse of buildings can be an attractive alternative to new construction in terms of sustainability and a circular economy. This environmentally conscious process of redeveloping older buildings closer to urban cores reduces the amount of sprawl and helps conserve land.



If a city is truly dedicated to urban revitalization, adaptive reuse can be an important part of achieving the goal, bringing benefits that include but are not limited to:

- Reduction in building materials
- Saving construction time
- Environmental responsibility
- Economic sustainability
- Availability of Federal, State, and local funding
- Hidden density
- Conservation of energy
- Cost savings on demolition
- Preservation of local identity and culture
- Decreased public and social costs
- Tax advantages

Typically, repurposing efforts cost less than new building construction, and adaptive reuse initiatives can subsequently revitalize and increase the value of public assets in the long run. Because these buildings are already built, all the emissions, fossil fuels, carbon, and lumber related to construction are embodied and in place. With public officials having struggled so long without funding to address these deferred maintenance issues, this type of adaptive reuse innovation promises to become the norm.

### **Bigger Revitalization in Texas**

In lieu of new construction, States like Texas—which has experienced a steady population explosion over the past decade—have turned to adaptive reuse as a preferred option to accommodate new businesses, an increase in housing demand, and an overall interest in sustainable development. In particular, as Texas’s major metropolises have seen tremendous population booms, so, too, has the growth in repurposing existing, older, and often smaller properties—the majority of which throughout the State possess important history and character.

As a result, architecture firms and developers have jumped at numerous opportunities to become more involved in this burgeoning segment of the construction industry. Across Texas, scores of historic buildings and outdated sites have become preserved and equipped for modern, productive use. For example, a number of adaptive reuse projects over the last several years include:

- Transforming Austin’s defunct Highland Mall into a new campus for Austin Community College
- Renovating the Union Bankers Building in Dallas that was vacant for nearly two decades into a boutique hotel
- Converting the 108-year-old Nash Hardware Building in Fort Worth into the city’s first-ever all-girls school, the Young Women’s Leadership Academy



- Repurposing the historic General Tire manufacturing building into the University of Baylor Research and Innovation Collaborative in Waco
- Redeveloping the 500,000-square-foot Barbara Jordan Post Office into a new public destination with three programmatic strips dedicated to culture and retail, food market and collaborative office spaces, and a rooftop park
- Turning the abandoned, 23-acre Pearl Brewing Company complex in San Antonio into a mixed-use urban village with nearly 20 restaurants, 15 distinct retail shops, a two-acre park, a local campus for the Culinary Institute of America, a food hall, and a hotel

Opportunities like these abound, with over 22 companies<sup>4</sup> having relocated their national headquarters to the greater Houston area over the last several years, designing new uses for old properties has a key role in this expansion. Amazon, for example, announced in late 2020 that it will be launching a million-square-foot distribution center in north Texas, creating an estimated 43,000 jobs throughout the region. That massive influx carries the need for housing, retail, recreation, and other facilities. For these cities in Texas riding the steep escalation in their population numbers, adaptive reuse is not just an opportunity, it is a necessity—to accommodate available land space, city planning, and infrastructure demand.

### **Factors and Considerations**

Repurposing old architecture does not come without its share of difficulties, however. While local design firms and architecture firms understand the range of adaptive reuse possibilities, they caution that projects centered on these outmoded, older structures face their own special types of challenges and basic considerations. *Is there adequate and sufficient parking for a different, new business? Does this site provide ample visibility? How will location affect or impact street traffic?* Other factors include:

- **Capital investment** – development, construction, marketing, maintenance, and administrative costs
- **Asset condition** – the building’s age, structural integrity, residual service life, spatial layout, and location and ease of retrofitting or installing new building components
- **Regulations** – building codes, fire safety regulations, energy-efficient rating systems and local, State, historic commissions, and National Park requirements
- **Social considerations** – dislocation of residents, economic decline, disruption of community life
- **Environmental considerations** – water efficiency, energy conservation, materials and resources, built heritage preservation, and urban regeneration

Because these repurposing projects can appear daunting with certain complexities and nuances, more architectural consultants are providing specific services in this area of adaptive reuse to help simplify the process and attempt to confidently address a variety of issues ahead of time.

### **Adaptive reuse experts and specialists**

Over the past few decades, architecture and design firms have pivoted their expertise toward adaptive reuse, working alongside building owners, developers, and other stakeholders to



determine a building's viability for conservation and repurposing. Applying an in-depth understanding of both the short-term and long-term goals of a particular building, they combine hands-on knowledge with innovative thinking to navigate through construction obstacles and conceptualize projects that will fit their clients' needs and goals.

While many of these consultancies embrace the challenge and potential of adaptive reuse projects, winning awards for their enterprising designs, they also bring a mixed-use vision that oftentimes create holistic purposes for the community—pedestrian accessibility, outdoor seating, bicycle racks, civic beautification, dog parks, and other latent urban amenities.

Respective of Texas, firsthand knowledge of a variety of local historic designs provides a unique balance of cultural insight with cost-effective solutions to evaluate architectural intent and building constructability. It is paramount that these businesses work with agencies like the Texas Historical Commission and other local heritage and historical societies, not simply to save historical structures from demolition or welcome large businesses into cities but also to help discover new ways to bring enjoyment, utility, and cultural livelihood for future generations.

<sup>1</sup> [Texas CRES, LLC](#)

#### **Resources:**

[ModernCities.com](#)

[GlobeSt.com](#)

[Structures, TX](#)

[Strategic Partnerships, Inc.](#)

[Wikipedia: adaptive reuse](#)

[Arch Daily](#)