

Material Innovation Center, San Antonio

108 Robins Dr, San Antonio, TX 78226

The Material Innovation Center (MIC) is approximately 18 acres of land located within the larger 1,900 acre Port San Antonio campus. Port San Antonio, a defense base established in 2001 to redevelop the former Kelly Air Force Base, is a dynamic technology and innovation campus and is home to several leading global industries: aerospace, defense, global logistics, manufacturing, cybersecurity, and education. Currently, more than 80 tenants employ 18,000 people. The Boeing Center at Tech Port, a technology and event center, is anchored directly across the street from the MIC site. The site is served by air, rail, and road. The surrounding area is undergoing numerous urban regeneration initiatives, either in the planning stages or underway, including multimodal street improvements and connection to a greenway and trail system.

The MIC site includes 30 extant residential-form structures and garages constructed circa 1920 to 1950, plus approximately 5 acres of developable vacant land. The MIC is envisioned as a mixed-use circular economy innovation campus and as a hub for reuse-focused businesses and organizations to co-locate for the sharing of resources, the creation of public-private partnerships, and the growth of innovative circular companies and organizations.

The site vision includes the rehabilitation of existing structures in a vibrant way and a new mixed-use facility or facilities on the vacant portion of the campus that unifies the site. The overall site development should exemplify carbon reduction, on-site reuse, circular design, urban green space, and diverse, activated, socially-supportive infrastructure.



Plot Area:

The campus (including land and buildings) occupies approximately 18 acres within Port San Antonio's 1,900 acre campus on the near Southwest side of San Antonio. The site is approximately 6 miles from downtown.

Expected Land Use: The proposal must include space for City + partner building material reuse and surplus functions, including the intake and storage of materials; workshop space for education and workforce development; and space to convene groups to learn about and implement circular projects. Expected additional programming includes space for research and labs, shared offices, and event space.

Teams are invited to propose other mixed-use functions to foster a decarbonized, resilient, and accessible

environment that results in a more complete neighborhood. A wide range of creative development concepts is welcomed, especially those that include urban greening strategies and public space.

Site Ownership:

The site is owned by Port San Antonio, a defense base. The site is currently leased by the City of San Antonio.

Type of Property transfer intended:

Port San Antonio and the City intend to do a long-term lease for a portion or full area of the site. The terms and duration conditions are open for teams to propose.

Deadline for the submission of the Expression of Interest:

Thursday 21 November, 11am CDT

Presentation of the site and development expectations

The Material Innovation Center is located approximately 6 miles southwest of San Antonio's downtown core in near southwest San Antonio. The historic location of the site reflects the critical role of the military, transportation, and manufacturing industries to the development of the city. Prior to the Base Realignment and Closure (BRAC) process (1995-2001), the military installation called Kelly Field and later Kelly Air Force Base trained and employed tens of thousands of aviators, mechanics, and civilians beginning in 1917. The campus remains an important cultural site for military history, with broad community support for the reuse and reactivation of the extant structures to maintain this legacy. The campus is listed on the National Register of Historic Places and may be eligible for both state and federal historic tax credits.

The site is bordered by the Joint Base San Antonio (JBSA) Kelly Annex to the south, commercial tenants to the west and east, and the Boeing Center at Tech Port and commercial tenants to the north. Within a 1 mile radius there are additional commercial tenants and manufacturing entities, state-of-the-art office towers, Kelly Field of Joint Base San Antonio-Lackland, St Philip's College Southwest Campus, and various residential neighborhoods and apartment complexes.

Designed programming and future site use include a minimum of 50,000sf of non-contiguous occupiable building space (both new and existing sf) with designated City and partner building material reuse functions, to include building material and surplus donation, processing, redistribution, and research and development. These spaces should be flexible and adaptable to scale to include additional material categories, including the reuse of textiles, electronics, furniture, medical equipment, glass, and organics, that may be rented or utilized by startups, nonprofits, companies, educational institutions, or community organizations.

Rather than a MRF or transfer facility, the desire is for spaces to function more as living laboratories. Examples of prospective activities include: prepping reclaimed lumber to serve as a kit-of-parts for a new accessory dwelling unit; mending and upcycling textiles; repairing electronics, office furniture, and medical equipment for redistribution; washing glass wine bottles or takeout containers for redistribution to area restaurants; and utilizing on-site or area food scraps to brew beer or develop innovative composting methods. The desire is for these spaces to be accessible by the community and serve as experiential learning opportunities in addition to economic incubation spaces. Please see the last section of this document (**City climate priorities and environmental challenges**) for design strategies that ensure the Center is a living case of the sustainability, decarbonization, and reuse goals it seeks to achieve.

Port San Antonio and the City of San Antonio invite creative mixed-use development concepts in addition to essential material reuse functions. Preliminary ideas for site uses are outlined below. The list is not comprehensive, but all proposed functions should center around the goal of activating the site to create a micro-economy that serves as a destination, generates economic value, and supports social interaction amongst diverse users within the site and as an extension of the greater Port San Antonio campus. San Antonio aims to be the circular economy hub and reuse economic engine of Texas and the United States, and this project is an anchor of this vision.

- **Circular Economy Training, Skills, and Innovation:** The site aligns with Port San Antonio's goal to Build Futures. There is potential for a resource cluster focusing on circular economy, waste management strategies i.e., innovative waste reduction and repair initiatives, byproduct synergies, and more to support workforce training, startup incubation, and new job creation for sustainable industries. A combined

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hub for circular economy, upcycling, and repair training and knowledge to support the sustainable workforce of the future is expected, including formal incubation spaces and more flexible/informal spaces that support community repair cafes and lending libraries.

- **Research Labs and Maker Spaces:** The Material Innovation Center site currently supports research and prototyping projects that advance concepts like Salvage-to-ADU (reclaimed building materials for affordable housing repair and production). Infrastructure to support research may include coworking spaces, digital visualization labs, a sustainability and energy modeling center, research and development labs, product testing, workshops, and prototyping areas.
- **Community of Makers, Artists, and Professionals:** San Antonio is home to lauded reuse and redevelopment projects like Pearl, La Villita, and Hemisfair that support diverse micro-economies where people can work, shop, dine, learn, and play. The existing buildings, ranging from 1,400 to 2,500+ sf, are exceptional candidates for artists, small businesses, shops, restaurants, cafes, galleries, and studios. Existing buildings should be rehabilitated and repurposed to minimize carbon impacts, to include additions that support a flexibility of uses and maintain the unique character of the streetscape. Retail or pop-up shop elements can support products made from the Material Innovation Center's materials or research efforts, bridging the gap between innovation and the market.
- **Outdoor Spaces for Gathering, Play, and Learning:** The site includes heritage oak trees that are more than 100 years old, resulting in a tree canopy that naturally cools and shades. The interstitial spaces between existing buildings provide ample opportunities for a unique pedestrian experience including native gardens, playscapes, public art, urban farming, rainwater harvesting, outdoor event spaces, interpretive elements, and more. Community-generated ideas have included an outdoor reclaimed neon sign art walk, spaces for farmers and makers markets, and an outdoor exhibition/experimentation space that brings interior functions outdoors. The full content can be found within the *dataroom*.
- **A Complete Neighborhood:** This site has the potential to serve area residential communities, activate the former base in new ways, and support a more complete, vibrant space on the near southwest side. Neighborhood-supporting uses and amenities are strongly desired, especially those that create economic opportunities and equitable access for BIPOC and traditionally excluded communities and businesses.



— DEVELOPABLE
— POTENTIAL
RELOCATION

Figure 1: Aerial of Material Innovation Center site with areas identified for potential relocation of buildings and new development. Portions of the site not annotated have been identified for rehabilitation with additions and site modifications. This map is intended as a conceptual guide and teams may propose alternative solutions that retain the maximum existing buildings.

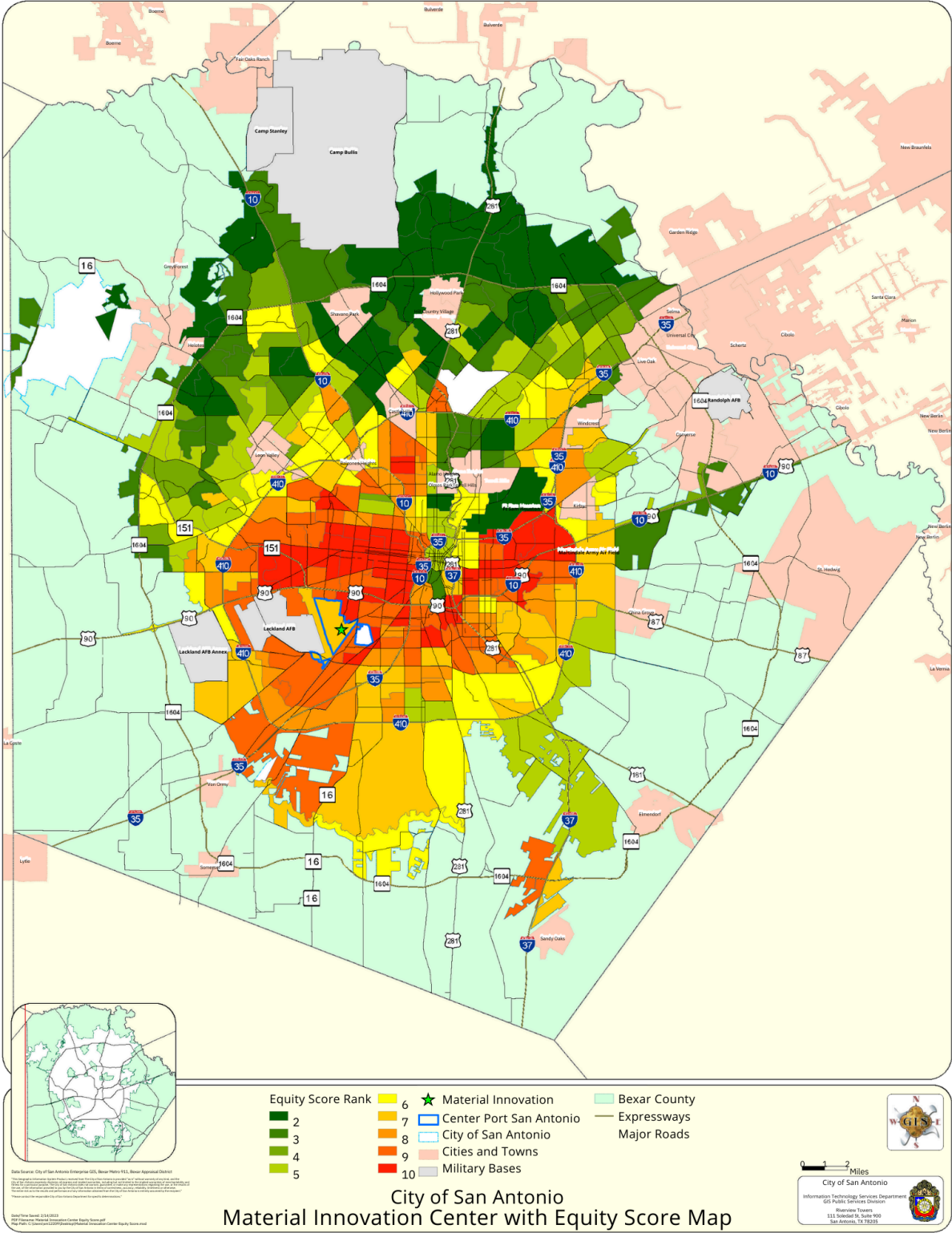


Figure 2: Material Innovation Center site location with Equity Score Map

Specific planning rules and regulations

In 2007, the City of San Antonio granted special permitting authority to Port San Antonio to govern technical plan review, permitting, inspection, and certificate of occupancy for the campus, which has the unique ability to provide critical and timely assistance to customers. Port permitting authority covers all aspects of construction including building permits, M.E.P. trade permits, fire permits, sign permits, certificates of occupancy, etc. The Port follows the [Unified Development Code](#) (UDC) of the City of San Antonio.

The site is a local historic landmark and exterior scopes of work require review and approval from the City of San Antonio Office of Historic Preservation, which is also the site lessee. For existing buildings, teams will work in coordination with the City for guidance on rehabilitation scopes, to include additions and modifications. Select outbuildings may be relocated or selectively dismantled to support the successful team's project. If select buildings are removed, deconstruction and the reuse of materials on site is required. The project team may propose select relocation or deconstruction of additional buildings not indicated in the site plan above as part of a holistic master plan and design strategy.

In addition to local landmark designation, the site is listed on the National Register of Historic Places. If the project team elects to pursue state or federal historic tax credits, it is advised to bring a historic tax credit consultant onto the team to manage state and federal requirements.

Parking and housing: Additional on-site parking is not required. The project may utilize existing parking structures and surface lots adjacent to the site. Nevertheless, teams should identify vehicular traffic impact of the project to ensure adequate surrounding infrastructure. At this time, housing is not a use that can be implemented into the site; however, teams may propose functions that support the existing residents adjacent to the Port San Antonio campus.

Funding opportunities through the [Inflation Reduction Act \(IRA\)](#) and [Bipartisan Infrastructure Law \(BIL\)](#) may provide the opportunity for additional public-private investment in the creation of the circular economy campus. If federal funding is utilized for part of the financing package, Section 106 review will be required. Please reach out to the City of San Antonio project team for updates on grant opportunities.

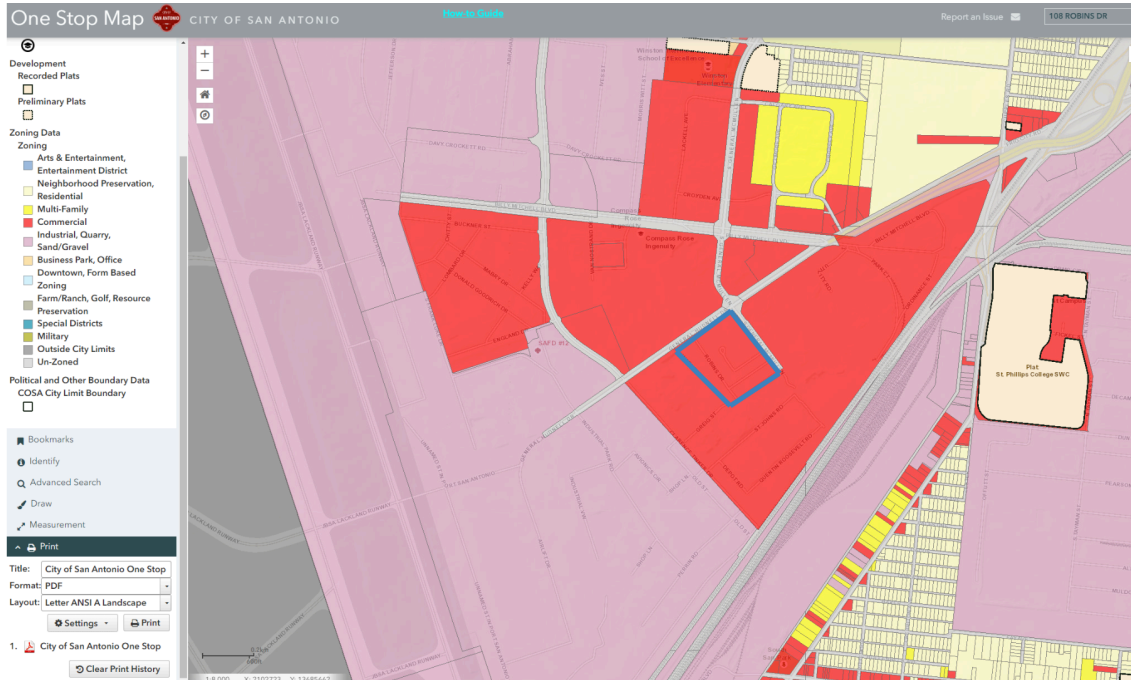


Figure 3: Material Innovation Center Site and Area Zoning Map

City climate priorities and environmental challenges

San Antonio is the seventh largest city in the United States and one of the fastest-growing cities in the country. As an inland city, San Antonio will not experience one of the most visible climate change impacts: sea level rise. However, by the end of this century, San Antonio is expected to be hotter and drier, facing challenges such as water shortages, spiking energy costs, and increased risk for wildfires.

To manage these challenges, the City of San Antonio's first [Climate Action and Adaptation Plan](#) (CAAP) was adopted in 2019. The plan outlines the following climate ready action areas:

1. Increase carbon-free energy
2. Reduce building energy consumption
3. Reduce transportation energy consumption
4. Advance the circular economy
5. Promote biodiversity and healthy ecosystems
6. Educate and empower
7. Increase infrastructure resilience
8. Strengthen public health systems
9. Enhance emergency management and community preparedness
10. Promote, restore, and protect green infrastructure and ecosystems
11. Protect local food security
12. Increase resilience awareness and outreach
13. Ensure equity in adaptation

In 2022, San Antonio made a major stride in action area #4 by adopting a [deconstruction ordinance](#), becoming the largest city in the United States to ensure building materials are recovered for reuse from older housing stock. Informed by San Antonio's specific city climate priorities, policies, and ambitions, in addition to the competition's ten climate challenges, projects are invited to incorporate the following objectives:

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- **Retain the maximum amount of existing buildings and heritage trees** to utilize embodied carbon, naturally cooling site elements, and the unique local heritage of the site.
- **Design for flexibility and adaptability** of uses and spaces. **Design for disassembly** is highly sought after.
- **Source hyperlocal materials, labor, and art**, with an emphasis on unique regional building and design techniques and traditions, as well as reclaimed or surplus materials. Responsibly-sourced materials are also encouraged, including mass timber.
- **Create a holistic, restorative environment** that results in a more complete neighborhood, emphasizing human scale and diversity experiences and uses.
- **Acquire certification or accreditation** from existing ambitious green building frameworks, including those offered by International Living Future Institute and Sustainable Sites Initiative. Zero Carbon Certification is highly desired.
- **Incorporate infrastructure that directly addresses climate resilience** and supports site sustainability, including rainwater catchment systems, solar energy, EV and bicycle infrastructure, and on-site composting.
- **Foster exterior and interior environments** that promote social inclusion, community engagement, equity of access and experience, and excitement and wonder.
- **Exemplify the ambitions of today and tomorrow through design**, with facilities and infrastructure that serve as pinnacle examples of regenerative design, circular construction, technological innovation, community cohesion, cultural identity, and climate resilience.
- In sum: plan, design, build, operate and manage all-round sustainable, culturally, functionally, socially and economically climate-adapted, resource efficient, zero-emission, healthy, safe, flexible and resilient buildings through a whole life cycle approach.