

Downtown Houston Pedestrian Lighting Analysis & Masterplan

EXECUTIVE SUMMARY

Downtown Houston boasts vibrant cultural destinations, including stadiums, theaters, a convention center, and many restaurants and bustling bars. These offerings draw millions of visitors to Downtown yearly. The growing population of Downtown residents means the 20+ parks and green spaces are utilized at all hours of the day by families with children and dog owners. Downtown boasts some well-lit areas, like the pedestrian-friendly Main Street and the interior of our parks. However, numerous blocks remain insufficiently illuminated. This uneven illumination creates a patchwork of safety and comfort, leaving pedestrians with a sense of unease when navigating the city after sundown.

In early 2023, the Houston Downtown Management District, on behalf of Downtown Houston+, engaged the consulting firm and lighting experts, Arup, to conduct a lighting analysis of Downtown Houston with the goal of understanding the pedestrian experience and determining priority lighting improvements to enhance Downtown's nighttime.

Two reports were produced as part of this study: An Existing Conditions Lighting Analysis and Lighting Design Masterplan. The recommendations focus on creating Downtown identity, activating the nighttime, and ensuring inclusivity through design.

Key Findings:

- Geographic inconsistencies: Downtown core is well-lit, while northern, southern, and east/west areas are darker, creating safety concerns.
- Tree canopy obstruction: Existing streetlights are blocked, requiring alternative illumination methods within canopies.
- Spotlighting effect: Brightly lit areas like Trebly Park contrast with adjacent dark streets, causing discomfort and visibility issues.

Masterplan Vision

- Layered lighting approach: Ambient (horizontal and vertical) and accent illumination create safe, legible, and interesting environments.
- Connecting key nodes: Prioritize corridors linking activity hubs like Discovery Green, POST, and Main Street.



- 8 lighting intervention toolkits: Implement strategically, often in combination, like:
- Illuminating underpasses, METRO light rail shelters, and foliage in the right-of-way.
- Standardizing lamping for consistent color temperature.
- Activating empty surface parking lots and storefronts through light.
- Increasing public park and façade lighting.
- Comprehensive mural analysis: Prioritize 33 "Big Art. Bigger Change." murals with recommendations for gobo, wall washing, or integrated lighting concepts.

Next Steps

- Implement a mural illumination program
- Advance programs to implement toolkits at priority locations in partnership with the Downtown Redevelopment Authority, the City of Houston, and private properties:
 - o Replacing bulbs for color correlation.
 - o Underpasses.
 - o Façade lighting.
 - Station platform lighting (METRO).
 - Park entrances.
 - o Foliage.
 - o Retail lighting.
 - Activating parking lots.

The Downtown Pedestrian Lighting Plan provides a comprehensive strategy for enhancing Downtown's nighttime experience through improved lighting, connectivity, and mural illumination. Implementing its recommendations will contribute to a safer, more vibrant, and inclusive Downtown environment.