### 2023 AIA | DC Chapter Design Awards

Project Title: Washington Metropolitan Area Transit Authority (WMATA) Headquarters

Location: Washington, DC

Date of Completion: September 2022

#### Project Statement (150 words max):

The newly re-imagined headquarters for the Washington Metropolitan Area Transit Authority (WMATA) creates a civic building that engages the public realm and connects people to WMATA's transit mission.

Metro's Headquarters was created with three goals:

- to engage the public realm;
- to responsibly transform and future-proof the development;
- to authentically connect employees and visitors with WMATA's Transit Mission.

An existing, eight-story, precast, 1970s structure was transformed into a 205,000-SF, 11-story, daylight-filled space with expanded ground-floor retail situated on a 42,000-SF lot.

The project focused on creating a new, welcoming, safe, healthy, and productive space with the goal of becoming an "Employer of Choice" to the 600 employees working in the building. While safety was a critical component to the project, the goal was to conceal added screening and security elements to not detract from the overall experience for visitors and personnel.

# Design Narrative: How does this project address Design for Integration, Wellbeing, and Discovery? (150 words max)

The biggest challenge behind the WMATA headquarters project was coordination with the existing structural elements, while simultaneously removing and replacing the skin and roofing system, along with a three-story addition. The resulting office headquarters integrates seamlessly into the existing foundation and structure, while completely transforming the interior and exterior elements into a 205,000-SF, high-performance, targeted LEED Platinum<sup>®</sup> facility.

The project focused on creating a new, welcoming, safe, healthy, and productive environment to WMATA's 600 in-office employees. Features include the integration of internal stair connecting workspaces, carefully curated employee amenities, wellness features like a fitness center with locker rooms and showers, healthy food options through vending services, pedestrian-friendly interior layout and building location, and access to outdoor areas with striking views of the Washington Monument and US Capitol—all contributing to a healthy employee experience.

# Community Engagement: How does this project address Design for Equitable Communities and Economy? (150 words max)

Transit is an equalizer. WMATA prioritizes customer service and that focus is inherent in their new headquarters building. It includes inviting the public for its board meetings and a new Transit Accessibility Center, a "one-stop shop" for information and assistance in meeting the accessible transportation needs of customers with disabilities.

WMATA's goal for the new DC headquarters was to save \$130 Million over the next 20 years as part of its real estate masterplan. In addition, the design-build delivery model optimized costs and procurement from the beginning of design through the delivery of the building. Selections for systems and materials were careful and deliberate to ensure a balance between high-quality and thoughtful design necessary for US Commission of Fine Arts approval, long term durability, as well as affordability. During programming, the design team worked with WMATA to optimize their space needs and occupy the building from the bottom-up. This freed the top three floors, taller space with abundant daylight and incredible views, to be rented to like-minded organizations day-one, as well as accommodate significant future expansion or contraction within WMATA's own building.

# Sustainability and Resilience: How does this project address Design for Ecosystems, Water, Energy, Resources, and Change? (150 words max)

This building targets to achieve LEED Platinum<sup>®</sup> v4 certification. The selection of a hyper transitconnected site, and the decisions for building reuse to reduce embodied carbon footprint, and reskinning the building to provide high quality daylighting throughout the interiors were sustainability drivers at the early stages of the project. Subsequently, a selective choice of building and envelope systems, building materials, and high levels of storm water management all contributed to the building's sustainability.

With the goal to reduce energy consumption through the optimization of contributing systems, the team conducted a comprehensive energy optimization study during conceptual design to determine the building's skin and assess the life cycle and cost/energy benefits to different building systems. The energy and carbon reduction achieved through the building is equivalent to 534 fewer cars driven for an entire year.

## Would you like this project to be considered for a Jury Citation in any of the following categories? (For more information on the 10 Measures from the Framework for Design Excellence, please <u>click here</u>.)

- $\boxtimes$  Integration
- ⊠ Equitable Communities
- $\boxtimes$  Ecosystems
- 🛛 Water
- $\boxtimes$  Economy
- ⊠ Energy

 $\boxtimes$  Well-being

⊠ Resources

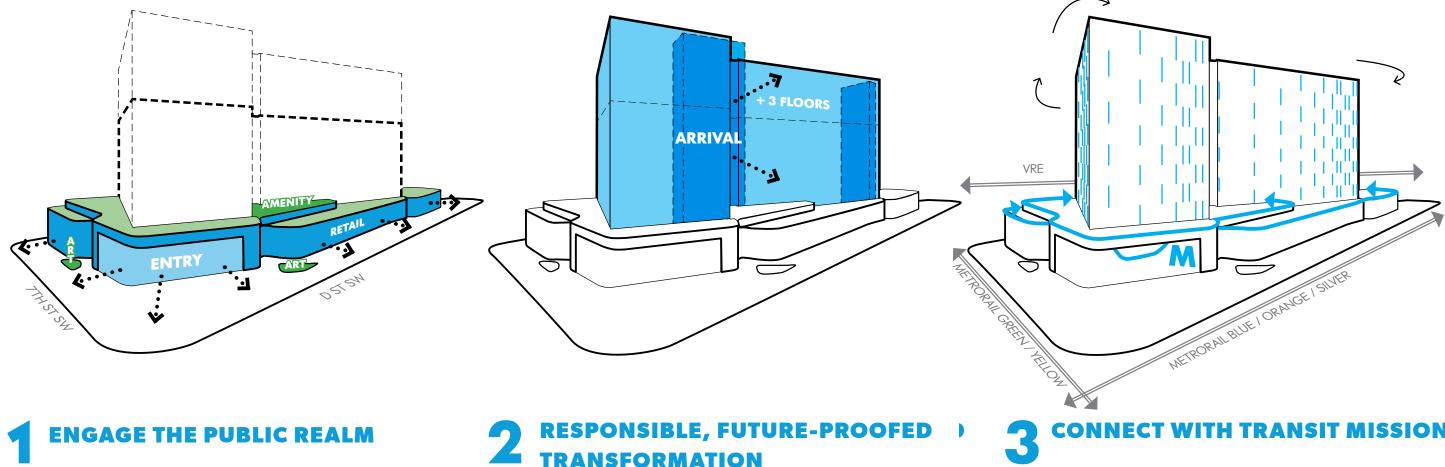
🛛 Change

□ Discovery

### WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY (WMATA) HEADQUARTERS

The newly re-imagined headquarters for the Washington Metropolitan Area Transit Authority (WMATA), completed in 2022 in Washington, DC, creates a civic building that engages the public realm and connects people to WMATA's transit mission.

### WASHINGTON, DC ARCHITECTURE



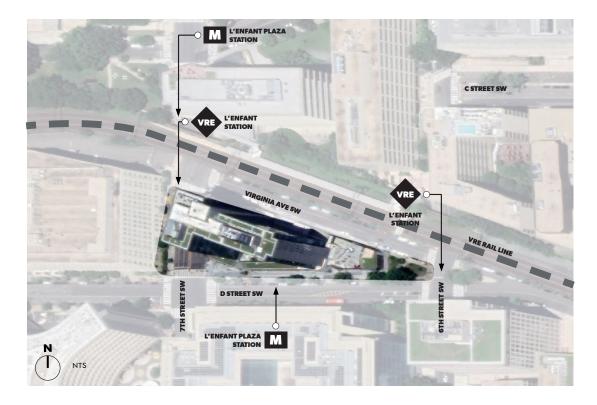
#### **PROJECT STATEMENT**

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Whether coming from metrorail at L'Enfant Plaza, descending from the VRE rail, or walking from the National Mall, the building fills its triangular city block, surrounded by some of the most active bus and rail transit in the region.







### **NEIGHBORHOOD CONTEXT**

The site is activated by commuters connecting along some of the most active transit lines in the region, including the L'Enfant Plaza Metrorail transfer station, several metrobus lines, Virginia Railway Express (VRE) travelers, and pedestrian traffic from the National Mall.

Located within the D-5 Downtown Zone for highdensity commercial and mixed uses, the project team worked closely with DC Public Space, DC Office of Zoning, and the US Commission of Fine Arts (CFA) to elegantly resolve the challenge of sustainably reusing the existing building structure.

In order to create dedicated, ground floor retail, a series of architectural features were approved to address the challenge of a discrepancy between the ground floor and sidewalk elevations along D Street. These created a vibrant, public-facing street frontage.

BEFORE VIEW, VIRGINIA AVE AND 7TH ST SW



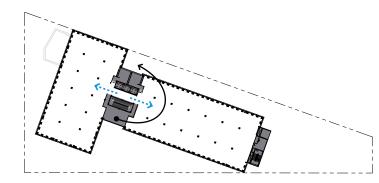


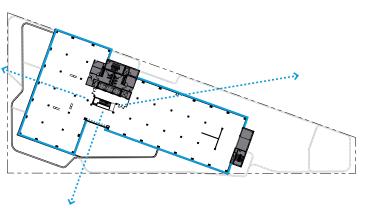


#### ENTERING THE LOBBY UNDER 'AURA'

Hou de Sousa's 'Aura' sculpture in the building's lobby is a joyful play on the region's traditional, coffered ceilings in transit and civic architecture. The soft, curving forms from the building's exterior continue in the lobby, easing you on paths either to the boardroom on the left, or to the office elevators to the right.

#### TRANSFORMATION





#### ORIGINAL PLANNING MODEL UNDERWHELMING ARRIVAL AND BIFURCATED FLOOR PLAN

#### **REVISED PLANNING MODEL** IMPACTFUL ARRIVAL AND FLOOR OPENNESS

#### **DESIGN FOR ECONOMY**

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#### **DESIGN FOR INTEGRATION**

The biggest challenge behind the WMATA headquarters project was coordination with the existing structural elements, while simultaneously removing and replacing the skin and roofing system, along with a three-story addition. The resulting office headquarters integrates seamlessly into the existing foundation and structure, while completely transforming the interior and exterior elements into a 205,000-SF, high-performance, targeted LEED Platinum® facility.



TEXTURED METAL PANEL EXPRESSION WITH INTEGRAL WINDOWS CONVEY SENSE OF THE RHYTHM OF RIDERS GATHERING AT STOPS



LIGHTLY TEXTURED GLASS VOLUMES UNIFY FACADE AND PROVIDE BACKDROP FOR PODIUM AND CORE EXPRESSIONS

#### FACADE ARTICULATION CONCEPT

The projecting fins on the office tower express movement around the site. In addition to strategic solar shading on each facade, these one-floor tall fins increase in density as they move counterclockwise around the building, symbolic of the cyclical nature of passengers in transit. The fins are most dense near the corner of 7th and D Street SW, where Metro lines cross underground at L'Enfant Plaza Station. From the National Mall, you can see the dense cluster of these fins as you look down 7th Street, subtly adding WMATA's symbolic presence into the heart of the Washington region.



CURVILINEAR PODIUM EXPRESSION UNIFIES STREETSCAPE ARCHITECTURE FOR ENGAGING PUBLIC REALM







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#### ANTICIPATED CERTIFICATION



#### **DESIGN FOR ECOSYSTEM & ENERGY**

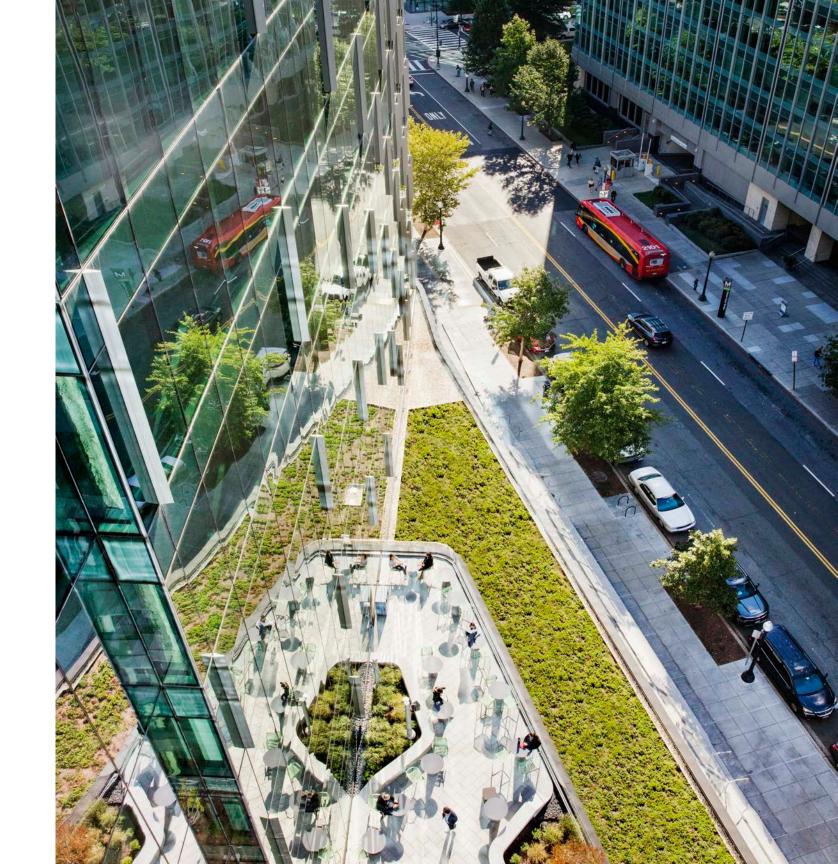
This building targets to achieve LEED Platinum® v4 certification. The selection of a hyper transit-connected site, and the decisions for building reuse to reduce embodied carbon footprint, and reskinning the building to provide high quality daylighting throughout the interiors were sustainability drivers at the early stages of the project. Subsequently, a selective choice of building and envelope systems, building materials, and high levels of storm water management all contributed to the building's sustainability.

With the goal to reduce energy consumption through the optimization of contributing systems, the team conducted a comprehensive energy optimization study during conceptual design to determine the building's skin and assess the life cycle and cost/energy benefits to different building systems. The energy and carbon reduction achieved through the building is equivalent to 534 fewer cars driven for an entire year.

#### **DESIGN FOR WATER**

Water and waste reduction elements included water bottle filling stations, touchless bathroom fixtures which save water and reduce the spread of germs, as well as a robust recycling program.

Stormwater treatment for this project was comprised of three main best management practices; green roof over a significant portion of the building roofs, infiltration facility which took roof water and percolated the stormwater runoff into the soil for groundwater recharge, and a hydrodynamic separator which filtered runoff from the loading area. These stormwater practices combined to exceed the stormwater management requirements for the project.







#### **DESIGN FOR WELL-BEING**

The project focused on creating a new, welcoming, safe, healthy, and productive environment with the goal of becoming an "Employer of Choice" to WMATA's 600 in-office employees. Features include the integration of internal stair connecting workspaces, carefully curated employee amenities, wellness features like a fitness center with locker rooms and showers, healthy food options through vending services, pedestrian-friendly interior layout and building location, and access to outdoor areas with striking views of the Washington Monument and US Capitol—all contributing to a healthy employee experience.



#### CONNECTED TO WMATA'S TRANSIT MISSION

Building on the poetic architectural references to movement at the exterior, the interior spaces look to connect employees and visitors with WMATA's transit mission much more directly. The design team worked with the client's visual archives and information from interviews with transit users to curate graphics. From the tile silhouettes of transit users (top), to the storytelling walls on each office floor (right), the abstracted bus-schedule way-finding graphic at the interconnecting stair (next page), and the WMATA history timeline opposite the 3rd floor outdoor terrace (last page), each space is punctuated by WMATA's core values.







#### DESIGN FOR CHANGE

WMATA's headquarters transformed an aloof, brutalist building into a flexible, light-filled office. By reconfiguring the building's core and transforming an egress stair into an open, interconnecting stair, creates a hut at the hinge-point between the two 60-foot office bars provides a sense of arrival and connection across the entire floor. New sill-to-ceiling, highperformance glass fills the floor with natural daylight, meeting the typically European standard that every desk is within 30-feet of natural light. With these transformations, the building core and shell are flexible to accommodate other tenant or building uses in the future. The renovation also brought the structure up to exacting forced protection standards, which are largely invisible in the open-feeling design.

