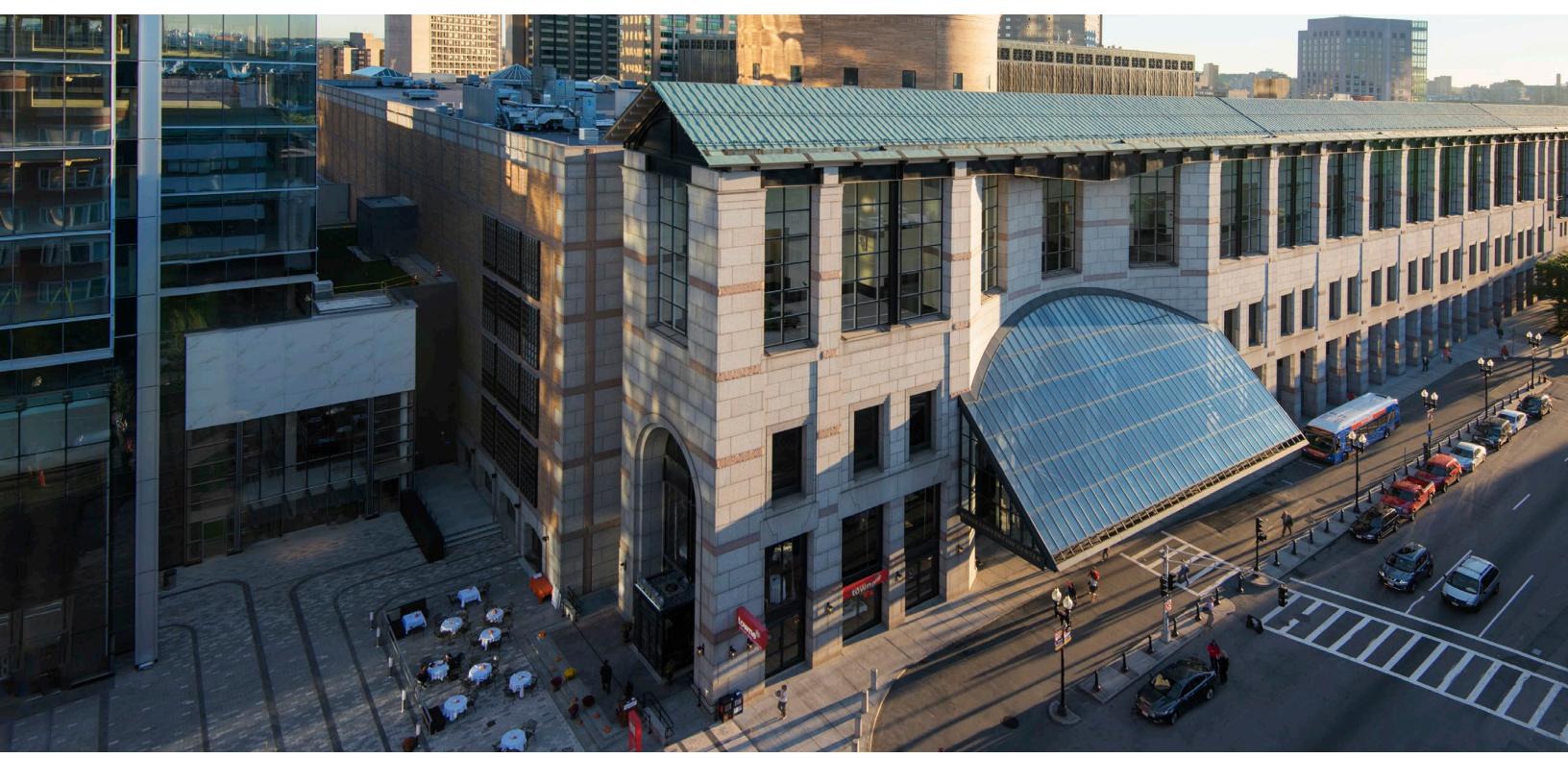
# Economic Analysis and Planning

**Chapter 3: Hynes Convention Center** 

MASSACHUSETTS CONVENTION CENTER AUTHORITY

Boston, MA

March 2025



HCC Aerial Photo | Photo credit: Signature Boston



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01

# **Executive Statement**

### A Modernized Facility

When the Hynes Convention Center (HCC) was initially put up for sale in the fall of 2019, combined with the effects of the global COVID-19 pandemic, investments in event sales, deferred maintenance, and planned capital projects were paused due to uncertainty around its future. By the end of 2022, a decision was reached to retain the HCC as an MCCA asset, accompanied by a renewed commitment to the facility.

Chapter 3 is dedicated to the analysis and future development of the HCC. The Economic Analysis and Planning RFR, established by A&F, outlined key opportunities for growth and development, which served as the framework for this study. Our team has structured the assessment, scope, and findings for the HCC into a comprehensive report focused on key areas impacting ongoing operations, sustainability initiatives, capital planning opportunities, and community engagement, particularly within the surrounding neighborhoods of the Back Bay. The report highlights specific opportunities for the HCC to engage with and better serve the diverse community within these neighborhoods as well as the broader Boston and Massachusetts regions.

Additionally, a market and financial analysis has been developed to support the continued competitive and financial success of the HCC, aiming to both sustain and enhance its inherent aspects. Our findings outline guiding principles for interdisciplinary advancement of the facility, with recommendations that build upon the MCCA's ongoing efforts to maintain and elevate the HCC's success, and the Economic Development objectives for The Commonwealth.

# **Key Highlights:**

- Improve communications with stakeholders across the City
- Provide opportunities for small, minority owned, and non-profit MA industries to showcase and participate in the economic upside of the convention business, as well as promoting use of other spaces within the HCC.
- Improve public space opportunities at the perimeter of the building through the renovation of the Boylston Street plaza, and Dalton Street facades.
- Increase opportunities for meeting room and breakout spaces by converting the existing cafeteria on Marathon Plaza and Exhibit Hall-B.
- Improve ROI and modernize wayfinding by implementing digital signage throughout the facility with advertising options.
- Evaluate the long term viability of the truck marshalling yard in Allston/Brighton; explore other long term permanent options.
- Continue addressing ongoing deferred maintenance projects by SGH and STV.
   Coordinate with sustainability goals.
- Prioritize decarbonization and net carbon neutral operations. Execute energy conservation measures, and fuel switching from gas to electric systems.
   Implement on-site solar pv, and off-site renewable electric and e-steam procurement.
- Focus long term planning that minimizes risks associated with climate related hazards.
- Schedule key capital projects that improve the functionality of the current facility
- Continue the practice of leveraging MCCA and operational resources that are home based at the BCEC. This practice results in both efficiencies for client experience and allows for costs to be optimized between the two facilities.
- Align sales efforts and establish specific property sales targets for groups/ industry segments aligned with the economic development plan.
- Focus on offering the best-in-class in facilities that cater to the unique needs of the dynamic industries, such as life science, technology, and medical.



# Inventory of Existing Land & Buildings

The Hynes Convention Center site is located within Boston's Back Bay neighborhood, and is physically connected to the Prudential Center, as well as the Sheraton Boston Hotel and the Boston Marriott Copley Place. Located within a historic neighborhood, the facility is uniquely positioned to provide pedestrian connections on all sides.

Land use data shows the whole parcel is classified as a tax-exempt institutional use, but the Capital Grille space within the property is classified as commercial. Due to the mixed-use nature of development with Back Bay, there is a strong mix of land uses within the study area, with many institutional and residential uses integrated amongst the commercial properties.

The site is split-zoned, with the northern portion within 100 feet of Boylston Street falling under Boston Proper Zoning District, B-8-120c subdistrict with a PDA Permitted overlay. The remaining southern portion is located within the Huntington Avenue/Prudential Center district, in the General Area subdistrict, with no PDA overlay. The entire site is located within two other zoning overlays, including the Restricted Parking District and Groundwater Conservation Overlay, which guide development and parking needs. The Groundwater Conservation Overlay District, requires provisions for groundwater infiltration in any new development.

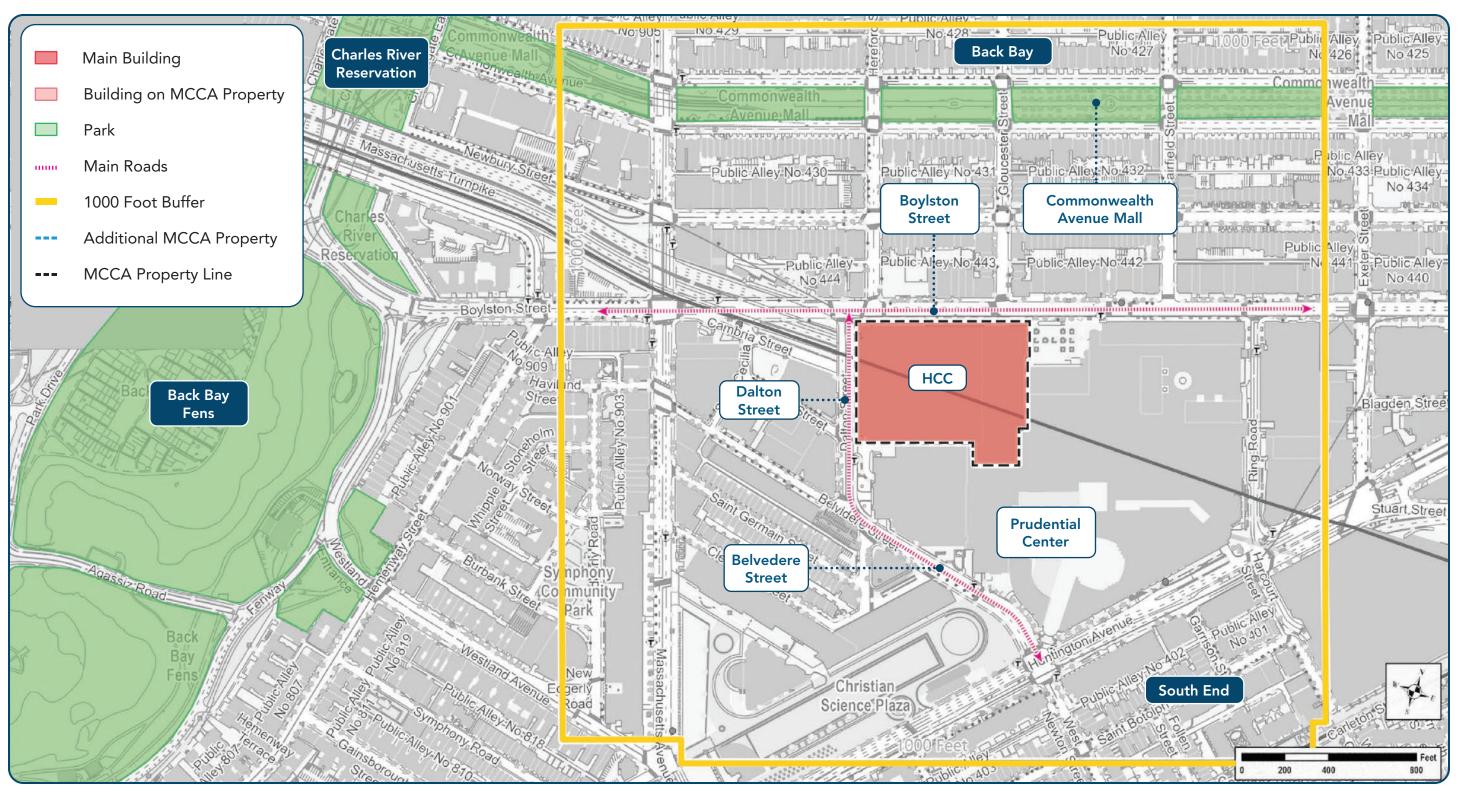
Although not within a FEMA Floodplain, the property is susceptible to flooding in the past, particularly in the lower levels and loading dock areas.

City of Boston heat island mapping shows that Boylston and Dalton Streets surrounding the HCC is disproportionately hot compared to the city standard, influenced by paved and impervious surfaces and lack of shade.

# **Key Findings:**

- ballroom for banquets, receptions, and large gatherings.

- public transportation, including the MBTA Green Line.



Existing Conditions Map | Credit: Nitsch

# 03

# Community Engagement

# The Hynes Convention Center is a beloved asset in the Back Bay.

Residents and local groups recognize the economic benefits the Hynes provides to the local hotels, restaurants, and stores, and appreciate the crowds of attendees and tourists who populate the neighborhood during conventions. However, over the past ten years, the Hynes has been opened and closed many times and numerous discussions and neighborhood meetings have been dedicated to the future of the Hynes. Community feedback has been that these open-ended discussions have been very disruptive, as neighbors and city residents are looking for a resolution on the future of the Hynes.

### Highlighting the Local Neighborhood

The space outside the Hynes is a lost opportunity. As seen in the Hynes recommendations, residents felt the desire to enliven the front streetscape as a pedestrian district.

"There's really nothing to draw people in. It's a block you hurry through," says Amy Cotter, associate director of urban programs at Cambridge's Lincoln Institute. Build a buzzing street level that's full of small businesses—not just chain restaurants or big corporate retailers, but smaller spaces where local up-and-comers could thrive"

"Let's activate the area in front of the building along Boylston Street – let's fill in the empty driveway and provide landscaping and benches, as well as schedule pop-up stores w/ local small businesses like what was done in the Seaport."

### **Key Feedback:**

- "The Hynes is a <u>significant</u> asset to the Back Bay neighborhood, the state, and the region. It is irreplaceable."
- "The continued strength of the hospitality industry has been important to Back Bay. In addition, the hotels, the restaurants, and the shops play an important role for economic development, providing employment to hundreds of diverse residents from around the State."
- "The infamous pause button was pressed in 2019. It's five years later. We've had proposals to sell the Hynes, not sell the Hynes, expand the BCEC, not expand the BCEC, RFPs that have been put out and withdrawn. We need to inject some stability and purpose back into the MCCA."



### **Community + Industry Engagement**

In all interviews, the neighbors conveyed their desire to use the spaces inside the Hynes when the building is empty, as well as promote activations that reflect the neighborhood when conventions are in town. The team is recommending the development of 'convener spaces' inside the Hynes, to be coordinated through the CEC and operations teams at MCCA. During the sale discussions, when the Hynes was shut down, local shops, cafes and restaurants bemoaned the lack of foot traffic to the neighborhoods of the South End, Back Bay, the Fenway, and the streets surrounding St. Botoloph Street.

"We felt the impacts. We can help tell the Massachusetts story by connecting convention-goers to our local neighborhood – we have a strong history and numerous diverse, locally-owned shops and restaurants."

There is an opportunity to utilize the Hynes' strengths to attract a very specific type of event and clientele, while also complementing what its sister properties are doing throughout the year.

### **During Convention Dates**

- During conventions, convener spaces would be used to showcase local innovators and small businesses based
  on the content of the event, as well as provide a space for arts and cultural groups to provide live performances
  for attendees, organized and curated by the CEC team at the MCCA, and working with local organizations in the
  neighborhood. Locally curated tours to the abutting neighborhoods can provide new sources of revenue for local
  minority and small business owners, while also sharing the history of our neighborhoods.
- The Hynes could complement what is happening at the BCEC by providing additional industry space.
- The perception of the Hynes is that the space is dated, and is not easy for loading / single floor loading. The site has its challenges for conventioneers.
- Curate more events that showcase Boston's unique industries such as the New England Seafood convention.
- According to the MCCA communications team, prior to Covid there were art exhibits at the Hynes that focused on different neighborhoods and local cultures. This concept should be reinvigorated with collaboration between local youth and neighborhood organizations. This would be coordinated under the new curator that they are hiring and part of the overall MCCA arts initiative we are proposing.

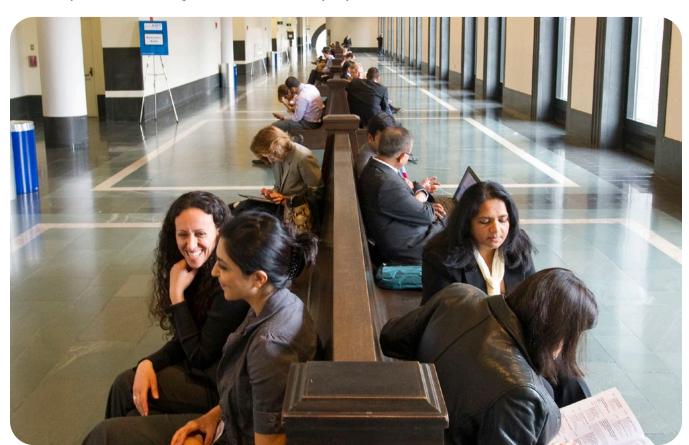
### **Outside Convention Dates**

- Finding convenient spaces for neighborhood association meetings, non-profit groups, and cultural events is constantly a challenge. Convener spaces at the Hynes could provide a new option to groups across the city. Explore how the Hynes can more easily be subdivided into flexible spaces and more affordable venues for locally organized events.
- Explore opportunities to create locally produced destination events. Working through the CEC team, the MCCA can deliver events highlighting what Boston is known for. For example, The Hynes can leverage its proximity to Kendall Square and the area's educational institutions by developing gatherings wrapped around our innovations. One example cited in an interview MA General Brigham and Bank of America jointly produced the 2024 World Medical Innovation Forum. The annual event explored cutting-edge healthcare innovations. The event was a dynamic 3-day convergence of healthcare, industry, and investment leaders, was rooted in a commitment to collaborative innovation which enables attendees to connect directly with top biotech CEOs, Harvard Medical School clinical leaders, investment experts and leading venture firms.

- Social services can be provided inside the Hynes, such as vaccine administration (as done in Covid), and classes dedicated to the education of immigrants and newcomers to our state.
- Indoor events featuring small performances and cultural showcases can provide innumerable opportunities for local cultural institutions.
- The South End has a very strong artistic influence and would like to see more art shows by local residents.

In addition, several specific examples were provided:

- The Hill House is a team of passionate volunteers and instructors working to fund and execute activities for the diverse social, educational, and recreational needs of families and children residing in Boston's downtown neighborhoods. They struggle to find indoor recreation space for their programs.
- Fenway Cares needs storage for extra food that they buy in advance.



Boylston Street Hallway | Photo credit: Signature Boston

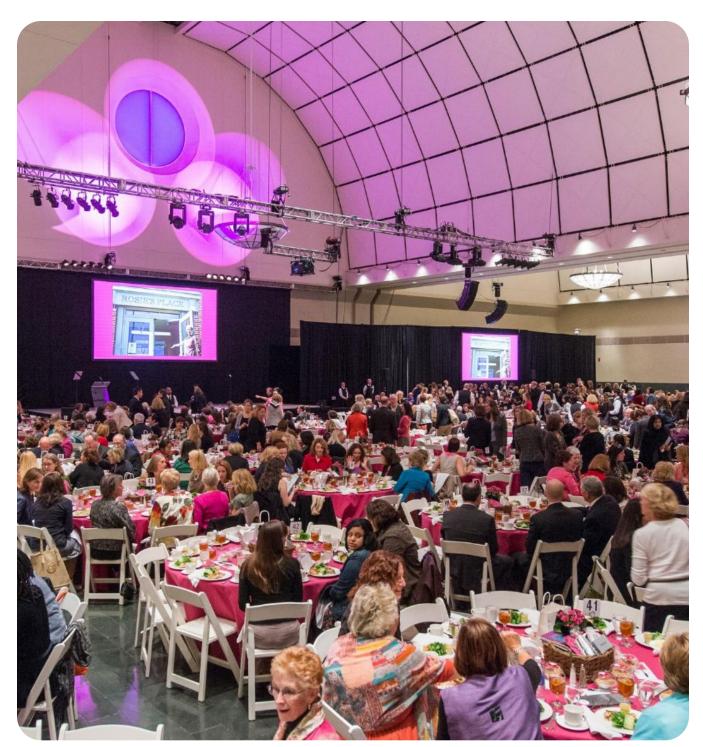
### **Communications**

A lack of consistent, ongoing communications with residents was mentioned in every interview. Most residents (Back Bay, South End, Fenway) had not heard from or about the MCCA in a long time. An annual meeting with the local neighborhood groups would go a long way to fostering future collaborations and providing benefits to the local residents. Whether it's a community website, social media, or direct outreach, Hynes-specific channels should keep neighbors informed:

- It will be important to coordinate with the city, the neighborhood, and the Hynes about upcoming events so that residents can plan accordingly to time their shopping and errands, as well as attend conventions, when appropriate. Interface with the 'Community-Based Advisory Committee' or with the CEC team is imperative to keep local residents informed, and to gather feedback from community members on improving best practices.
- It is important to reclaim the 'Veteran' recognition in the name of the center. Programming should draw upon this namesake and provide an event targeted only to veterans, to discuss SDO certificatation for businesses, job training options, career fairs and health benefits.



Escalator circulation in the Rotunda | Photo credit: Signature Boston



Ballroom | Photo credit: Signature Boston

# 04

# **Usage & Demand**

This section of the report provides an analysis of the usage and demand of the John B. Hynes Veterans Memorial Convention Center (Hynes).

This section aims to assess the current usage and future demand for John B. Hynes Veterans Memorial Convention Center (Hynes), located in the Back Bay neighborhood of Boston, Massachusetts. The sales and marketing efforts of this venue is led by the Boston Convention Marketing Center (BCMC), which is the single point of contact for event requirement submissions, hotel room blocks, facility contracts, and site visits.

Understanding the patterns of usage and the market demand is essential for optimizing operations, capital planning, and identifying potential market segments for growth. By analyzing historical trends and future patterns, strategic insights can be formed to optimize the convention center's usage and ensure long-term sustainability.

# **Key Findings:**

- Explore strategies to increase room block participation from a broader range of Back Bay hotels, beyond those directly connected to the venue
- Align sales efforts for targeted groups/industry segments with the economic development plan.
- Focus on offering the best-in-class in facilities that cater to the unique needs
  of the dynamic industries, such as life science, technology, and medical.

### **Back Bay Hotel Market**

### **Hotel Supply Overview**

The John B. Hynes Veterans Memorial Convention Center (Hynes) occupies a prime location in the Back Bay, one of Boston's most desirable neighborhoods for visitors. The area's upper-priced hotel inventory and competing demand from leisure and corporate travelers yield high Average Daily Rates (ADRs). As of June 2024, there were 19 existing hotels in Back Bay with a total key count of 6,708, all of which are categorized as "Upper-Upscale Class" or above. No hotels are designated below "Upscale" class. The lack of affordable accommodations in the area is a leading challenge for meeting planners.



Comparatively, Back Bay is an older hotel market than Seaport, with most hotels built before 2010. Only three new hotels have been added since 2015: The Revolution Hotel in 2018, the Four Seasons One Dalton in 2019, and The Raffles Boston in 2023. Two of these three newer hotels are considered 'Luxury Class,' while the Revolution Hotel is a hybrid hostel. These factors limit participation in citywide room blocks.

Despite hosting smaller events when compared to the BCEC, the Back Bay is home to more "big-box" hotels than the Seaport, including two hotels over 1,000 rooms and two hotels nearing 800 rooms. These four hotels total 3,800 rooms and represent more than half of the Back Bay's lodging inventory. In FY24, citywide events at the Hynes averaged attendance of approximately 4,000 per event. These smaller events allow Back Bay to accommodate the majority of citywide demand within the immediate neighborhood lodging supply.

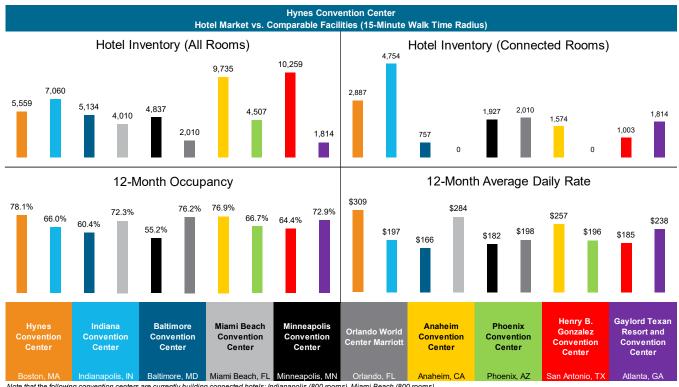
Several different events have altered the dynamics of room block commitments in recent years. The Sheraton Boston operated with over 1,000 rooms, but reduced its inventory to 428 rooms in January 2023, converting a hotel tower to student housing. In addition, the 1,060-room Hilton Boston Park Plaza was previously independent and added the Hilton branding in late 2023. With the power of Hilton's worldwide sales platform, the property is less reliant on citywide room blocks. As a result, there is a need for greater participation from additional hotels beyond the Marriott and the Westin to adequately accommodate lodging needs for groups booking the Hynes.

### Hotel Market Compared to Comparable Facilities

Relative to competitors, and particularly to its size, the Hynes offers a robust package of hotels, both connected and within walking distance, critical to meeting planners when selecting a destination. Like the BCEC, the Hynes is challenged by the strong performance of its own hospitality market. The hotels within a 15-minute walk of the facility lead the benchmarking set in both occupancy and ADR, which can make it challenging to secure room blocks for larger events, as hotels increasingly look to capitalize on strong transient and in-house group demand and the corresponding premium room rates.

In contrast with the Seaport neighborhood, Back Bay (i.e., the area within a 15-minute walk of the Hynes) has been essentially "built out" for decades. As a result, there has been little development since 2006, a trend which is projected by CoStar to continue over the next five years, there is a large supply of existing office, hotel, retail, and multi-family inventory, contributing to an extremely vibrant neighborhood which is ideal for conventions and tourism.

Generally, the development that has occurred in the Back Bay in recent years has trended towards luxury spaces and boutique hotels, as the demand for the neighborhood's amenities, in tandem with a limited capacity for the market to add supply, has driven up property values and rents. The Prudential Center, Copley Place, and the Hynes also contribute to this dynamic by generating significant foot traffic and tourism to the area.

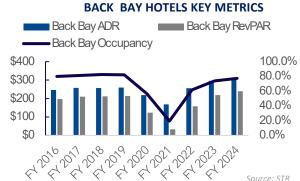


Note that the following convention centers are currently building connected hotels: Indianapolis (800 rooms), Miami Beach (800 rooms)

Source: Esri. CoStar. Johnson Consulting

### **Back Bay Lodging Market Performance**

In FY24, the Back Bay hotel market achieved an occupancy of 77% and an ADR of \$310, resulting in RevPAR of \$239. Overall, Back Bay has yet to recover total room nights from FY19. . As of FY24, compared to FY19, total occupied roomnights are



below by 10% / 201K room nights. This lower occupancy can be partly attributed to the lack of events at the Hynes due to the blackout dates caused by the presumptive sale of the facility, which was negated in 2022. While total roomnights have not fully recovered, 100.0% Back Bay achieved total revenues of \$16.4 million in FY24, the highest recorded revenues ever for the submarket.

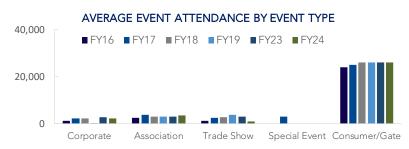
> Since FY 2016, the ADR variance between Back Bay and Seaport has grown. In FY24, Back Bay ADR averaged \$35 above Seaport, whereas in 2019 the variance was only \$14. Over this time period, Back Bay saw average annual ADR growth above the overall Boston/ Cambridge at 3% per year, whereas Boston/Cambridge achieved a CAGR of 2%.

### **Hynes Historical Events**

### Citywide Sales Events by Type

The Hynes, like the BCEC, caters towards associations, which comprise between 74% and 87% of all events accommodated at the facility. Peak association attendance occurred in FY17 with 126K attendees, driven by high average attendance per event. The pre-pandemic average was 98K attendees, 24% higher than the recent two-year average of 79K attendees.

Trade shows, both in number of events and average attendance, have yet to return to pre-pandemic levels. Consistent with national trends, in-person trade show attendance is still rebounding after COVID-19 as a result of economic considerations and softened business sentiment. As a result, to incentivize in-person attendance, meeting planners are focused on creating memorable and personalized experiences.



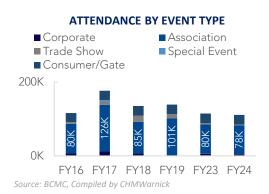
Source: BCMC, Compiled by CHMWarnick

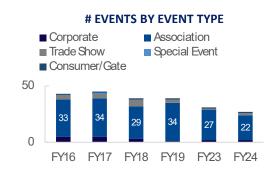
### Citywide Sales Events by Industry

Events at the Hynes, using the BCMC's inputted data, were matched with the corresponding Center for Exhibition Industry Research ("CEIR") industry sectors.

Medical and Health Care represents the largest share of total events. Pre-COVID, this industry consistently represented approximate one-third of all events. While the number of events has stayed consistent between FY23 and FY24, due to the decline in total events, this industry represents a larger share of total events at over 40%. Average event attendance has also increased, growing by approximately 3% year since FY16 (3,300 in FY24 versus 2,600 in FY16).

According to CEIR, Medical and Healthcare performed nationally at an 87.2 Index in 2023 compared to 2019. With events and attendance above pre-pandemic levels, the medical segment at the Hynes' outperformed the nation in terms of recovery, driven by Boston's dominance in this sector.



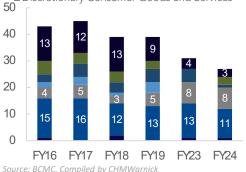


### Events by Industry Total Events by Industry

■ Financial, Legal and Real Estate
■ Education

Sporting Goods, Travel and Amusement

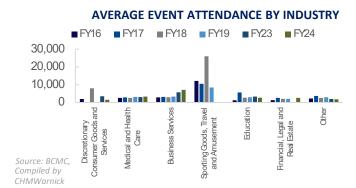
Business ServicesMedical and Health CareDiscretionary Consumer Goods and Services



Business Services (including Commercial, Professional, Engineering, and Publishing/Ad/Media) pre-COVID represented roughly 10% of all events. Since COVID, unlike the BCEC, the total events in this category has grown. In FY23 and FY24, the Hynes hosted 8 events each year in this category, double pre-pandemic performance. In addition, average attendance per event is growing. Prior to COVID, average attendance per event was approximately 3,000, but in FY24 totaled over 7,000 per event. This increase can largely be attributed to Professional. Financial, Legal, and Real Estate represented 11% of all events in FY24. With 3 events and over 20,000 RNs in FY24, this puts the number of events and RNs in line with prior years.

Education events have drastically declined over the years. In FY17, the Hynes hosted 5 Education Events with annual attendance of almost 29,000. In FY18 and FY19, attendance dropped to 10,700 and 14,700, respectively, and in FY24, the Hynes hosted only 1 Education Event with attendance of 2,700 RNs.

### **TOTAL ATTENDANCE BY INDUSTRY** ■ Other ■ Financial, Legal and Real Estate Education Sporting Goods, Travel and Amusement ■ Business Services Medical and Health Care ■ Discretionary Consumer Goods and Services 200K 150K 100K 50K 0K FY19 FY17 FY18 FY24 FY16 FY23 Source: BCMC, Compiled by CHMWarnick

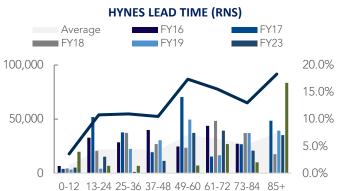


### Citywide Sales Historical Lead Time

Compared to the BCEC, the Hynes has a much shorter average booking window (55 months vs. 82 months in FY2024). Similarly, average lead time has increased since FY 2016, increasing by 44% / 17 months. This increase is at a lesser pace compared to the BCEC; over the same time period, the average lead time increased by over 67% at the BCEC, increasing by 33 months.

Overall, the Hynes has a much more even distribution of lead time compared to the BCEC. Because of the shorter lead time for Hynes events, bookings can potentially overlap with existing BCEC events. On days when both venues have events, the Hotel Relations team may face challenges securing the necessary room blocks for the Hynes. Additionally, if the BCEC event creates significant hotel compression, properties may be less inclined to allocate rooms for the Hynes, preferring to reserve inventory for future transient guests and in-house group demand.





Source: BCMC, Compiled by CHMWarnick

### **Hynes Occupancy & Dark Days**

### Occupancy By Month

Even before the renovations, the Hynes experienced significantly lower levels of occupancy compared to the BCEC. Over FY 2016 – 2019 and FY 2023 – FY 2024, the Hynes only experiences monthly occupancies above 70% on average two months out of the year.

			Total Hynes Fac	cility Occupanc	У		
	FY2016	FY2017	FY2018	FY2019	FY2023	FY2024	Average
July	53%	65%	36%	32%	21%	36%	41%
August	33%	47%	37%	55%	15%	12%	33%
September	28%	49%	26%	76%	52%	22%	42%
October	54%	39%	51%	62%	81%	44%	55%
November	59%	66%	52%	81%	63%	80%	67%
December	15%	24%	82%	23%	11%	11%	28%
<b>January</b>	31%	74%	35%	29%	37%	13%	37%
February	36%	22%	24%	60%	8%	16%	28%
March	71%	36%	74%	63%	52%	51%	58%
April	72%	74%	69%	80%	73%	35%	67%
May	53%	75%	40%	65%	57%	50%	57%
June	59%	61%	50%	48%	55%	24%	50%

Source: BCMC, Compiled by CHMWarnick

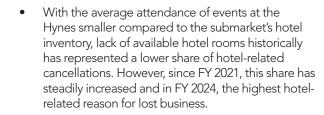
Like the BCEC, weakest performing months in terms of occupancy include December and August. However, February historically has had low occupancy, whereas this is a high occupancy month for the BCEC. Pre-COVID and disruption for the potential sale of the facility, total dark days ranged from a low of 67 in FY 2019 to a high of 99 in FY 2018, averaging 85 days.

Similar as to the BCEC, December and August frequently have a high number of dark days, with December having the greatest number of dark days three out of the four years analyzed. However, unlike the BCEC, January and February also comprise a large portion of the facility's dark days.

		Hynes Dark	Days		
	FY2016	FY2017	FY2018	FY2019	Average
July	8	4	11	8	8
August	12	7	17	5	10
September	11	2	7	3	6
October	2	13	4	3	6
November	1	8	0	0	2
December	21	19	15	18	18
January	11	17	9	15	13
February	15	7	17	2	10
March	1	2	1	2	2
April	0	0	1	0	0
May	3	0	9	5	4
June	7	1	8	6	6
Total	92	80	99	67	85

Source: BCMC, Compiled by CHMWarnick

Unlike the BCEC, in general, "Hotel" related reasons is the single-highest reason for lost business. Despite having a submarket with larger hotel inventory and events with smaller average attendance, the hotel market is one of the leading causes of lost business. When excluding the Hynes disposition, over the analysis period, "Hotel" represented 22% to 45% of all lost RNs, averaging 35%. In FY 2024, hotel-related lost business represented 40% of all lost RNs.





- Historically, the number one reason for hotel-related lost business was related to high rates of the citywide hotels. This comprised, on average, 47% of all hotel-related reasons over the analysis period. It wasn't until FY 2024 until this category fell to #2, below availability of hotels.
- On average, "Fits into Single Property" comprises 30% of all hotel-related lost business, compared to only 6% at the BCEC. This suggests that the Hynes has more non-convention center competitors and competes for the in-house meeting space at hotels in and outside Boston/Back Bay. This sentiment is echoed by the BCMC team which considers hotel/conference properties such as Gaylords to be among the Hynes' primary competition.

The Hynes loses more business than they accommodate. Between FY 2016 and FY 2019, and FY 2023 and FY 2024 (COVID years excluded), the facility generated 1.3M definite RNs but had lost demand of 2.3M RNs, representing 176% of definite demand. Outside 2017, pre-COVID, the ratio of lost RNs to definite RNs was consistent between 190% and 220%. Overall, total lost RNs was also consistent across all years, ranging from 317K in 2024 to 444K in 2019, averaging 384K across the analysis period.



Between FY 2025 and FY 2033, the Hynes reported total lost demand of 541K RNs. Almost half of this lost business is in FY 2025. Of FY25's 253K lost RNs, 136K (54%) resulted from the potential disposition. Analysis of future year data is skewed as a result of the non-selling directive for the Hynes as a result of the contemplated disposition.





Source: BCMC, Compiled by CHMWarnick

### **Hynes Benchmarking**

The Hynes is generally smaller than its benchmark set in terms of facility space. This is partly because it shares the Boston market with the BCEC. These two convention centers differ in size and orientation allowing them to target different events within the same geographical market. The Hynes's location in the dense Back Bay neighborhood also makes expansion essentially impossible. Additionally, it is relatively small compared to its benchmarks in terms of its largest space, with the Orlando World Center Marriott and Gaylord Texan Resort and Convention Center being its closest counterparts in this regard.

In contrast to the BCEC, the Hynes's benchmark set tends to have more ballroom space and individual ballrooms. Five out of nine benchmark facilities have three or more ballrooms, while a sixth (the Henry B. Gonzalez Convention Center) has two ballrooms. The Hynes has one relatively small ballroom with 24,544 square feet. While flexible compared to its benchmarks, the Hynes has fewer meeting rooms than the benchmark facility average. Facilities of similar size, such as the Orlando World Center Marriott and Gaylord Texan Resort, have significantly more meeting rooms.







Hynes Convention Center Rankings Amongst Benchmark Convention Centers								
	Value	R	anking					
Hotel Market Within 15-Minute Walk								
Hotel Inventory (All Rooms)	5,559	4	out of 10					
Hotel Inventory (Connected Rooms)	2,887	2	out of 10					
12-Month Occupancy	78.1%	- 1	out of 10					
12-Month Average Daily Rate	\$309	1	out of 10					
Location Attributes								
Retail Businesses (15-Minute Walk)	489	- 1	out of 10					
Daytime Population (15-Minute Walk)	98,348	- 1	out of 10					
Distance From Nearest International Airport (Miles)	6.1	3	out of 10					
Enplanements Nearest Major Airport (2023)	19,962,577	5	out of 10					
Facility Attributes								
Exhibit Space (SF)	176,480	9	out of 10					
Ballroom Space (SF)	24,544	10	out of 10					
Meeting Space (SF)	60,417	10	out of 10					
Total Function Space (SF)	261,441	10	out of 10					
Largest Space (SF)	101,966	10	out of 10					
Grand Ballroom Space (SF)	24,544	10	out of 10					
Junior Ballroom Space (SF)	0	9	out of 10					
Other Ballroom Space (SF)	0	8	out of 10					
Meeting Rooms	35	10	out of 10					
Demand (Most Recent Year Available)								
Number of Events	90	6	out of 8					
Total Attendance	299,335	8	out of 8					
Average Attendance per Event	3,326	6	out of 8					
Attendance per Square Foot	1.14	2	out of 8					
Revenue & Expenses (Most Recent Year Availabl	е							
Total Operating Revenue	\$16,437,842	7	out of 8					
Total Operating Expenses	\$14,313,439	1	out of 7					
Net Operating Income	\$2,124,404	1	out of 7					
Revenue per Total Function Space SF	\$63	- 1	out of 8					
Operating Expenses per Total Function Space SF	\$55	4	out of 7					

Despite its smaller size, the Hynes outperforms its competitors in terms of attendance, even though it hosts fewer events overall. This suggests a focus on quality and impact rather than quantity. It ranks second among its benchmarks in attendance per square foot, demonstrating its ability to maximize space and attract attendance levels comparable to much larger facilities. Similarly, the Hynes' low operating revenues are impacted significantly by its smaller size. Though it ranks seventh out of its benchmark set in terms of total operating revenue, it ranks first in terms of operating revenue per square foot of function space, and it is the only publicly owned facility amongst its benchmarking set to report a positive net operating income.

Clearly, the Hynes outperforms its size and competes with much larger facilities. Much of this is due to its location – the Back Bay neighborhood is ideal for supporting conventions, offering innumerable retail, dining, and entertainment options, in addition to a robust hotel supply. These qualities, in addition to the high level of service provided by its staff, help distinguish the Hynes within a competitive national market.

### **Hynes Economic Impact**

In FY 2024, the Hynes hosted 85 events, drawing over 256,000 attendees. Besides attendees, other participants like exhibitors and show managers also played a role in the economic impact through their use of local hotels and services. Signature Boston reports that these events resulted in 179,059 room nights during FYE 2024.

The spending habits of attendees, exhibitors, and event managers vary, which impacts their overall contribution to the economy. MCCA has developed detailed daily spending estimates for each group based on surveys and research, validated by Johnson Consulting. These figures were used to calculate the total economic contribution of events at the Hynes. For FY 2024, the Hynes' events are estimated to have generated \$168 million in total direct spending, including the operational spending at the facility.

This economic activity has wider effects, boosting earnings, employment, and tax revenues. In FY 2024, Hynes events are estimated to have contributed \$267 million in total spending, \$128 million in increased earnings, and 2,651 jobs, along with \$14.9 million in tax revenue from hotel and food and beverage taxes.

Note that these numbers were recorded during a year in which the Hynes was significantly impacted by maintenance-related closures. Looking ahead, the building is projected to grow its demand to pre-pandemic levels, with total spending reaching an estimated \$462 million by FY 2034.



Ballroom during an event | Photo credit: Signature Boston

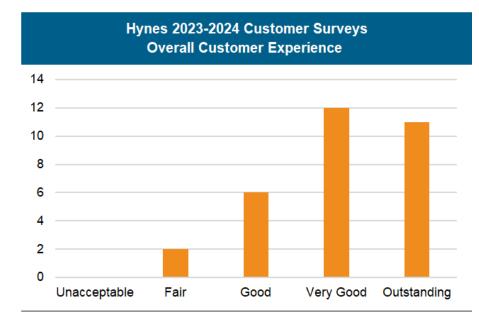
# **Hynes Economic Impact**

					ynes Vetera orical and F									
Events and Visitation	FYE 2018	FYE 2019	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034
# of Events Event Attendance Total Visitor-Days* Total Room Nights*	115 217,240 569,572 230,103	127 246,923 598,652 217,412	82 284,010 616,985 180,291	85 256,907 550,663 179,059	90 266,749 544,913 172,520	95 279,378 560,380 170,988	100 292,014 565,077 169,754	105 304,769 569,808 168,504	110 319,012 585,376 169,813	121 354,039 684,075 213,991	121 354,039 684,075 213,991	122 357,757 698,405 221,276	124 365,194 727,065 235,846	124 365,194 727,065 235,846
Direct Spending (\$Million)	FYE 2018	FYE 2019	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034
Hotel Food and Beverage Transportation Attraction Shopping Other Industries	\$63 27 12 10 15 20	\$62 29 13 11 16 22	\$57 33 15 13 19 22	\$59 31 14 12 17 20	\$58 31 14 13 18 20	\$60 33 15 13 19 21	\$61 34 15 14 20 20	\$62 35 16 14 21 20	\$64 37 17 15 22 21	\$84 45 20 18 26 27	\$86 46 21 19 27 28	\$92 49 22 20 28 30	\$101 52 24 21 30 33	\$104 54 24 22 31 34
Subtotal	\$147	\$153	\$159	\$153	\$153	\$160	\$164	\$168	\$176	\$220	\$227	\$241	\$262	\$270
Operational Spending	\$17	\$16	\$14	\$15	\$15	\$15	\$16	\$16	\$17	\$17	\$18	\$18	\$19	\$20
Total Direct Spending	\$164	\$169	\$173	\$168	\$168	\$175	\$180	\$184	\$193	\$238	\$245	\$259	\$281	\$289
Indirect and Induced Spending	\$98	\$101	\$103	\$100	\$100	\$105	\$107	\$110	\$115	\$142	\$146	\$155	\$167	\$173
TOTAL SPENDING  Direct Earnings and  Employment	\$262 FYE 2018	\$270 FYE 2019	\$277 FYE 2023	\$267 FYE 2024	\$268 FYE 2025	\$280 FYE 2026	\$287 FYE 2027	\$294 FYE 2028	\$308 FYE 2029	\$380 FYE 2030	\$391 FYE 2031	\$414 FYE 2032	\$448 FYE 2033	\$462 FYE 2034
Earnings (\$Million) Employment (FTE Jobs)	\$79 1,626	\$81 1,673	\$83 1,717	\$80 1,660	\$81 1,615	\$84 1,635	\$86 1,627	\$88 1,619	\$93 1,644	\$114 1,967	\$118 1,967	\$124 2,018	\$135 2,120	\$139 2,120
Earnings and Employment based on TOTAL Spending	FYE 2018	FYE 2019	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033	FYE 2034
Earnings (\$Million) Employment (FTE Jobs) Fiscal Impact (\$Million) Tax Rate	\$126 2,596 FYE 2018	\$129 2,672 FYE 2019	\$133 2,741 FYE 2023	\$128 2,651 FYE 2024	\$129 2,579 FYE 2025	\$134 2,611 FYE 2026	\$138 2,598 FYE 2027	\$141 2,585 FYE 2028	\$148 2,625 FYE 2029	\$182 3,140 FYE 2030	\$188 3,140 FYE 2031	\$199 3,222 FYE 2032	\$215 3,384 FYE 2033	\$222 3,384 FYE 2034
	1122010	1122010	1122020	1 1 2 2027	1122020	1122020	1 1 2 2021	1122020	1 1 2 2020	1 1 2 2000	1122001	1122002	1122000	1 1 2 200 4
By Types of Taxes           Hotel Tax         16.45%           Meals Tax         7.00%           Sales and Use Tax         6.25%	\$10.3 1.9 2.8	\$10.1 2.0 3.1	\$9.4 2.3 3.4	\$9.7 2.1 3.1	\$9.6 2.2 3.1	\$9.8 2.3 3.3	\$10.0 2.4 3.4	\$10.2 2.5 3.5	\$10.6 2.6 3.6	\$13.8 3.1 4.5	\$14.2 3.2 4.6	\$15.1 3.4 4.9	\$16.7 3.7 5.3	\$17.2 3.8 5.4
Total	\$15.0	\$15.2	\$15.1	\$14.9	\$14.9	\$15.4	\$15.7	\$16.1	\$16.8	\$21.4	\$22.1	\$23.4	\$25.6	\$26.4
By Jurisdiction State Taxes Local Taxes Special Authority Taxes	\$8.1 4.3 2.7	\$8.4 4.2 2.6	\$8.7 4.0 2.4	\$8.4 4.1 2.5	\$8.4 4.0 2.5	\$8.7 4.1 2.5	\$9.0 4.2 2.6	\$9.2 4.3 2.6	\$9.6 4.5 2.7	\$12.1 5.8 3.6	\$12.4 6.0 3.7	\$13.2 6.4 3.9	\$14.3 7.0 4.3	\$14.8 7.2 4.4
Total	\$15.0	\$15.2	\$15.1	\$14.9	\$14.9	\$15.4	\$15.7	\$16.1	\$16.8	\$21.4	\$22.1	\$23.4	\$25.6	\$26.4

\*Including visitor-days and room nights from attendees, exhibitors, event organizers, etc.
Source: Massachusetts Convention Center Authority, compiled by Johnson Consulting

### **Hynes Customer Satisfaction**

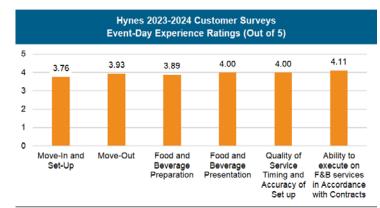
The Hynes Convention Center generally has high customer satisfaction ratings, though its overall experience rating of 4.03 suggests some room for improvement in facilities and operations. In FY 2024, Hynes customers were particularly satisfied with their sales experience, with ratings ranging from 4.07 to 4.67, highlighting the strength of the Signature Boston. Notably, the City of Boston itself received very high ratings for its attractiveness, accessibility and safety, and customers found the Hynes easy to access.



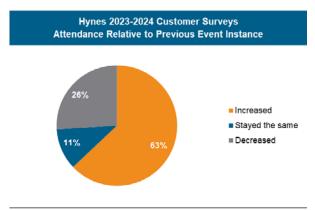
Source: Signature Boston, compiled by Johnson Consulting

Move-in and set-up received the lowest ratings from customers, indicating the challenges associated with the building's age and location within a dense, busy area of Boston. Other areas that could benefit from upgrades include wayfinding and signage (rated 3.59) and temperature control (3.62), two factors which are also likely impacted by the building's age.

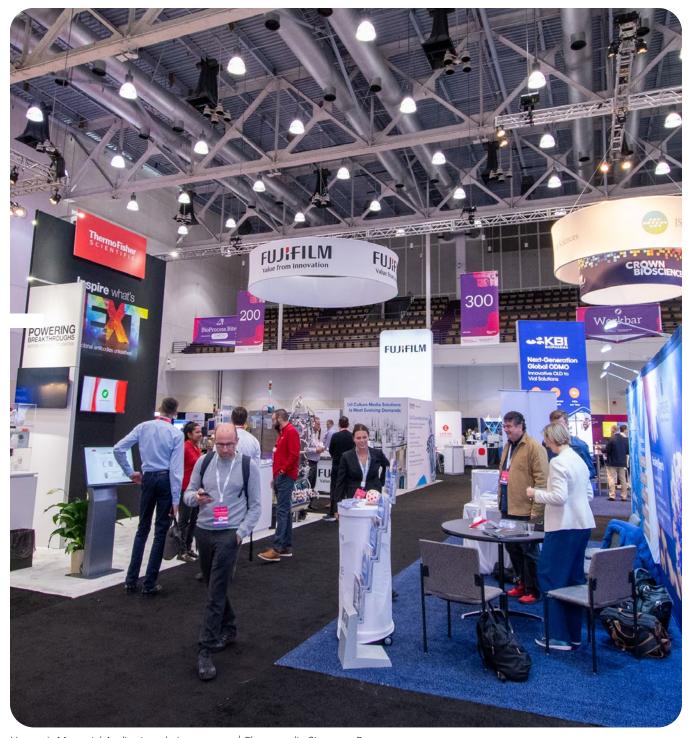
Events at the Hynes in FY 2024 performed well in terms of attendance, though not as strongly as those hosted at the BCEC. Relative to the previous event instance, only 63% of events saw growth, and 26% experienced a decrease in size. One confounding factor here could be the Hynes' smaller size relative to its competitive set, which could be a constraint on customers maximizing the size of their events.



Source: Signature Boston, compiled by Johnson Consulting



Source: Signature Boston, compiled by Johnson Consulting



 $\textit{Veretan's Memorial Auditorium during an event} \mid \textit{Photo credit: Signature Boston}$ 



# 05 Financial Analysis

This section of the report provides an analysis of the financial performance and capital requirements of the Hynes Convention Center.

The Hynes Convention Center, located in Boston's Back Bay, is a mid-sized convention and exhibition venue that is part of the Massachusetts Convention Center Authority (MCCA) portfolio. It has approximately 176,000 square feet of flexible exhibit space, along with meeting rooms, ballrooms, and a wide array of event services. Its location in the heart of Boston makes it particularly appealing for events that require easy access to hotels, restaurants, and shopping.

### **Key Findings:**

- Maintain Hynes as a Convention Center Operation.
- Increase the number of hotels participating in the Back Bay room block commitments, particularly outside the Copley Connection, due to the loss of 400 rooms at the Sheraton.
- Continue leveraging MCCA and operational resources based at the BCEC. This practice enhances client experience efficiencies and allows for optimized costs between the two facilities.



### **Hynes Convention Center Overview**

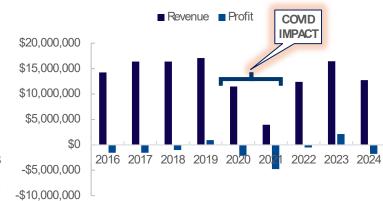
The Hynes is directly connected to several hotels, including the Sheraton Boston, and is part of the Prudential Center complex, which gives event attendees convenient access to numerous amenities. It is also connected to the Hynes Convention Center MBTA station, which provides access to public transportation.

The venue is well-suited for medium-sized conventions, trade shows, and corporate events, with a reputation for offering a high level of service and technology infrastructure. Despite discussions around potentially closing the Hynes as part of broader city redevelopment plans, it remains a key part of Boston's convention space portfolio, especially for events that don't require the larger scale of the Boston Convention and Exhibition Center (BCEC).

### **Revenue & Profit Trends**

FY 2016 to FY 2019 saw steady demand and operational activity with total revenues growing from \$14.2M to \$17.1M. Following the pandemic, revenues began to recover, reaching \$12.4M in FY 2022 and peaking at \$16.4M in FY 2023. Revenues fell to \$12.7M in FY 2024. This decline can be attributed to the stop sell implemented in the fall of 2019 through the fall of 2022 because of the potential sale (impact through 2029).

The facility operated at a loss for FY 2016 – FY 2018 against a net positive \$920K in FY 2019. This was driven by an increased number of events and lower expense margins. Post-COVID, the facility began



**HYNES 2016 - 2024 REVENUE AND PROFIT** 

to recover, returning to profitability in FY 2023 of \$2.1 million. However, FY 2024 ended with a net loss of (\$1.8) million, the result of scheduled closure for deferred maintenance coupled with higher labor and contracted services expenses.

### Revenue Per Square Foot (SF)



Before the pandemic, revenue per SF saw steady growth, improving from \$54 in FY 2016 to \$65 in FY 2019. Post-pandemic, revenue per SF rebounded to near FY 2019 levels, with FY 2023 reaching \$63. However, the stop sell initiative impacted FY 2024, bringing revenue per SF down to \$49. This drop was primarily driven by a sharp decrease in F&B revenue per SF, which fell from \$15 in FY 2023 to just \$4 in FY 2024. Revenue per SF is projected to grow in the baseline scenario, with the Hynes expected to reach \$72 in 2030 and \$89 in FY 2035.

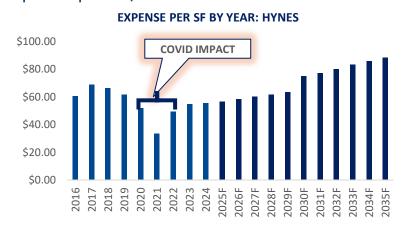
Revenue projections are impacted by eight additional closures of the facility due to the schedule to address deferred capital projects. These closures will impact the ability of The Hynes to generate optimal group room nights with an estimated decline in the range of 100K per year between FY 2025 and FY 2029. Project closures will end Q1 2029.



Ex-hall | Photo credit: Signature Boston

### **Expense per SF & Projected Revenues**

### Expense per Square Foot



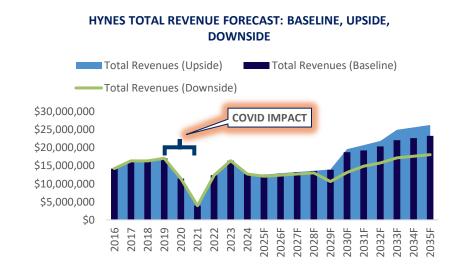
Expenses per SF increased steadily, from \$60 in FY 2016 to \$67 in 2018, then dropped to \$62 in FY 2019, reflecting operational efficiencies in labor expenses. Expenses started to rise again postpandemic, with \$49 per SF in FY 2022 and \$55 in FY 2023 and FY 2024. Rising costs are attributed to higher labor, contracted services, and utility costs. Significant cost increases are projected in the long-term, with expenses per SF expected to rise from \$75 in FY 2030 to \$88 in FY 2035. Much of this growth is attributed to the expenses noted above.

### Number of City-Wide Events

The Hynes reached its peak for city-wide events in 2017, hosting 45 events that year. By 2019, this number had declined to 39. Although post-COVID event counts have not returned to pre-pandemic levels, this recovery was also affected by the stop-sell initiative in 2018 and 2019, linked to the potential sale of the facility.

### Projected Revenues; Baseline, Upside, & Downside

The baseline forecast anticipates 27 events annually from FY 2025 to FY 2029, factoring in the stop-sell initiative from FY 2018 and FY 2019, as well as 8 additional planned closures of the facility to address deferred capital projects. During this period, revenues are expected to increase by \$1.3M, rising from \$13M to \$14M. In FY 2030, a substantial revenue jump is projected, with total revenue reaching \$18M and further growing to \$23M by 2035. This growth is the result of an increase in the number of events from 33 to 36, alongside higher revenues from convention services and rental income.

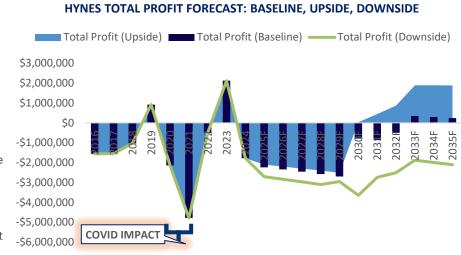


### **Projected Profit & Capital Spend**

### Projected Profit; Baseline, Upside, & Downside

Operating profit from FY 2025 – FY 2035 for the Hynes shows a gradual shift from consistent losses to eventual profitability. In the baseline model, the Hynes is projected to operate at a loss from FY 2025 to FY 2029, with losses increasing from (\$2.2M)/(18%) to (\$2.7M)/(19%).

Despite gradual revenue growth during this period, expenses outpace revenue, and the number of events remains steady at 27, due to the scheduled closures for deferred capital project work. Starting in FY 2030, there is a notable improvement in revenue, as the number of events increases to 33. The operating loss

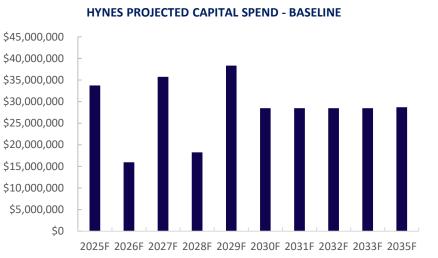


begins to narrow, with (\$784K)/(4%) in FY 2030 and (\$497K)/(2%) by FY 2032. The improvement is due to rising revenues, particularly in convention rental income and F&B coupled with expense margins decreasing from 104% to 102%.

The Hynes is forecasted to become profitable in FY 2033, with a positive operating profit of \$351K/2%. This trend continues with profits of \$297K/1% in 2034 and \$241K/1% in 2035, as the number of events increases to 36, and revenues from all categories, especially convention services and rental income, grow significantly. By FY 2035, the facility's financial profitability is stronger due to higher revenues and more stable expense management.

### Projected Capital Spend; Baseline, Upside, & Downside

Over the 11-year period from FY 2025 to FY 2035, substantial capital spending is projected to total \$313M (\$28.5M per year average) in the baseline scenario. These substantial investments are necessary to address deferred maintenance and ensure the aging facility remains competitive. There are eight additional scheduled closures of the Hynes during this period to address deferred capital maintenance needs. In modeling potential scenarios, the upside case projects (\$3.0M) in savings compared to the baseline, while the downside case forecasts an additional \$1.3M in costs.



# 06

# **Deferred Maintenance**

Originally constructed in 1963 and renovated in 1988, the HCC is well maintained, with a commitment to maintain high level operations. A third party study performed by SGH in 2015, and again updated in 2020, included a summary of projected needs and costs for the facility.

Currently, the facility is undergoing and planning future renovations with STV that will upgrade critical building mechanical and electrical infrastructure systems, as well as implement a capital replacement program with accessibility/building code and select building envelope improvements. Additional deferred maintenance items and costs were identified within this study. Together, a list of key items are included with overall approximate deferred maintenance costs.

Our design team evaluated third party documents, along with a collection of other existing condition documents and on-site reviews, and provided an overall list of key deferred maintenance priorities. Recommendations for future repair/replacement require consistent on-site evaluation in order to meet continued operation requirements.

General recommendations include the replacement of major mechanical, electrical, plumbing and fire protection components, according to the individual manufacturer's recommended "useful life" cycle, in order to maintain reliable performance and building safety. The MCCA should continue to perform regular preventive maintenance, timely upgrades, and testing to support and ensure the full extent of the "useful life" cycle. Any recommendations for future repair/replacement will take continued operation of the facilities as well as the MCCA's sustainability goals in mind. The deferred maintenance list shown on the next page represents a consolidated view of the key deferred maintenance items from SGH, STV and our design team.

# **Key Findings:**

### General

• Coordinate additional third party identified Deferred Maintenance costs already captured in the CCF Fund. Monitor MCCA's R33 and R35 work orders as well as future planned R53 work orders.

### Mechanical + Plumbing + Fire Protection

- Replace (1) air compressor that serves the dry piping systems
- Replace any remaining pneumatic HVAC controls systems with Direct Digital Controls (DDC).
- Replace hot and chilled water distribution pumps. New pumps shall be provided with VFDs.

### Electrical + Fire Alarm

- Replace normal and emergency power switchgear
- Replace the (2) emergency generators.



# **List of New Deferred Maintenance Projects**

Item #	SGH Report CRP # (1)	Cap Invest. List # (2)	Asset Title	Location	Description		Total Project Cost (3)	Permit Cost (4)
DF-01	N/A	N/A	Downstream Terminal Equipment Replacement	Facility	Replace downstream terminal equipment that is past useful life.		\$3,111,619	\$1,913,645
DF-02	N/A	N/A	Fans Replacement	Facility	Replace existing fans past their useful life.		\$713,310	\$438,685
DF-03	N/A	N/A	Air Compressors	Facility	Replace two air compressors that serve the dry-piping system		\$156,930	\$96,511
DF-04	N/A	N/A	Hot Water Recirculation System	Facility	Install new hot water recirculation system.		\$272,667	\$167,690
						Grand Total:	\$4,254,526	\$2,616,533

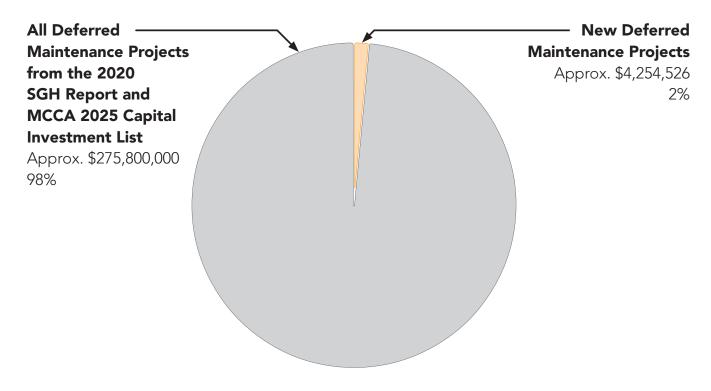
# List of Current & Ongoing Deferred Maintenance Projects (see note #2)

Item #	SGH Report CRP # (1)	Cap Invest. List # (2)	Asset Title	Location	Description		Permit Cost (4)
DF-06	5.20	N/A	Pneumatic HVAC Controls Replacement	Facility	Replace remaining pneumatic HVAC controls with Direct Digital Controls.	See Note #1	See Note #1
DF-07	N/A	R53	Distribution Pumps Replacements	Facility	Facility Replace hot distribution pumps.		See Note #1 & #4
DF-08	N/A	CRP6.0 R53	Emergency Generators	Facility	Replace the (2) emergency Generators	See Note #1 & #4	See Note #1 & #4
DF-09	8.1	N/A	Sprinkler Mains	Facility	Replace wet and dry sprinkler mains, branch lines, sprinklers, and auxilery valves.	See Note #1	See Note #1
DF-12	N/A	M80/S03	I-90 Hynes Tunnel Repair	I-90 Hynes Tunnel	Repair I-90 Tunnel ceiling which is below the Hynes. May also require work to the girders. Design only.	See Note #1	See Note #1
DF-13	N/A	R53	Distribution Pumps Replacements	Facility	Replace cold distribution pumps.	See Note #1 & #4	See Note #1 & #4
DF-14	N/A	CRP6.0/ R33	MEP Project (CM at Risk) - Elec. Switchgear	Facility	Replace remain switchgear.	See Note #1 & #4	See Note #1 & #4

### **Deferred Maintenance Costs**

### **Total Project Costs**

- Approx. \$4,254,526 of New Deferred Maintenance Projects. Escalated to FY 2026 (July 1, 2025).
- Approx. \$275,800,000 of All Deferred Maintenance Projects from the 2020 SGH Report and MCCA 2025 Capital Investment List. (See Notes).



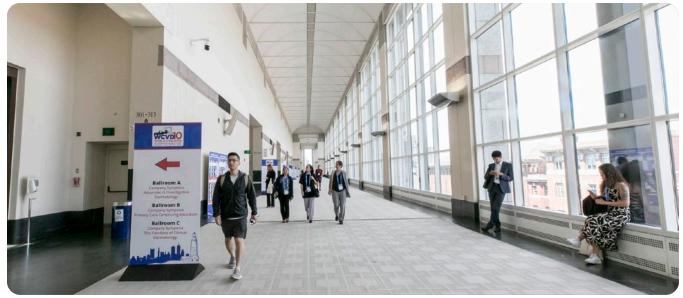
**Total Deferred Maintenance Costs:** 

Approx. \$280,054,526

New Deferred

Maintenance Projects

All Deferred Maintenance Projects from the 2020 SGH Report and MCCA 2022 Capital Investment List (Included in CCF)



Level 2 Boylston Street Hallway | Photo credit: Signature Boston

- (1) **SGH Report:** Provided by the MCCA, a Capital Replacement Program outlining deferred maintencance projects scheduled through fiscal year 2029.
- **(2) MCCA FY2025 Capital Projects Budget:** Provided by the MCCA, a running list of Capital Projects including facility improvements, technology upgrades, and equipment purchases for fiscal year 2025.
- (3) Total Project Cost: Hard costs as determined by a cost estimator plus a 30% mark-up for soft costs.
- **(4) Permit Cost:** inclusive to total costs, this is 61.5% of the Total Project Cost. This number should be used for determining MAAB upgrade requirements per the 30% threshold set fourth by the State of MA.
- **Note #1:** Costs are to be identified from the 2020 SGH Report and/or the MCCA Capital Investment Report provided by the MCCA. Project costs have already been captured in the CCF as per CHMW coordination with MCCA and A&F.
- **Note #2:** See the 2020 SGH Deferred Maintenance Project List for a full list of additional project costs. These costs have already been captured in the CCF as per CHMW coordination with the MCCA and A&F. List of Key Deferred Maintenance Projects is a snapshot of the SGH and Capital Projects reports provided by the MCCA. These are highlighted as the more important projects which should be undertaken.
- Note #3: The 2020 SGH Costs have been escalated to July 1st 2025 (FY 2026).
- **Note #4:** This work is being performed in whole or in part by STV as part of a revised deferred maintenance report. The costs associated with this work is are captured in the CCF as per CHMW coordination with MCCA and A&F.

# 07

# Sustainability & Decarbonization

The MCCA can serve as a leader in the realm of sustainability while also fulfilling its economic mission. Holistic sustainability, energy efficiency, operational decarbonization, embodied carbon reduction, the creation of healthy, equitable spaces, and community stewardship are at the heart of MCCA's sustainability initiatives.

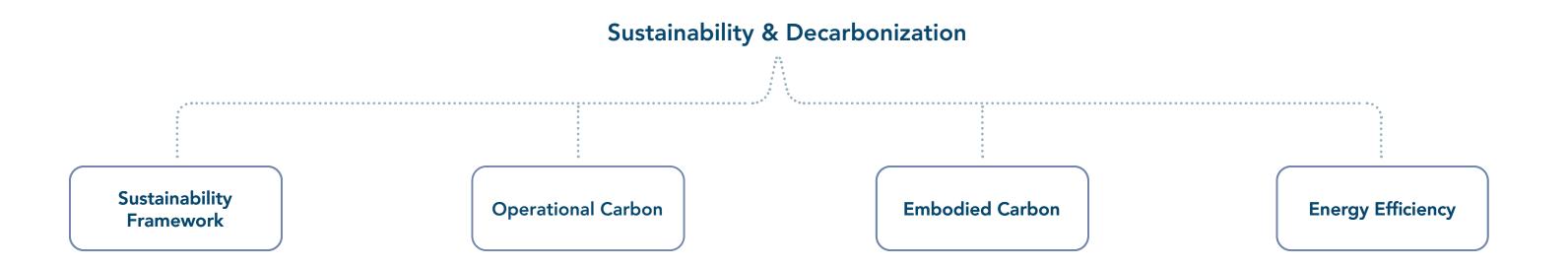
Sustainable design and operations of all facilities is a core goal of MCCA's mission. As the facility is currently not yet net carbon neutral operations, the MCCA staff is currently developing ongoing energy conservation measures, fuel switching options, and opportunities to implement on site renewable energy generation (solar) and off-site renewable energy procurement (VPPA). Although a comprehensive plan is not yet fully coordinated, a comprehensive sustainability framework, path for operational decarbonization, and embodied carbon reduction strategy will help MCCA quantify and track the extensive sustainability and carbon neutral initiatives already underway at the HCC.

Establishing a well-developed sustainability framework is valuable for informing many aspects of the MCCA's buildings and operations – from policy and procurement decisions to facility design requirements. Identifying pathways for net carbon neutral operations is critical for any future renovation of MCCA facilities. Benchmarking of present-day energy usage and emissions provides a valuable metric by which to assess the strategies available to achieve operational carbon neutrality.

Lastly, with regard to embodied carbon, key considerations for both the existing systems and major renovations have also been highlighted. For major renovations and interior fit-outs, prioritizing embodied carbon reduction is of utmost importance. Minimizing embodied carbon should be a priority for new capital projects, vendors, and event operations.

### **Key Findings:**

- Develop holistic sustainability guidelines tailored to MCCA's priorities should be applied across all facilities. Establish a formal energy emissions baseline.
- Develop an investment-grade ASHRAE Level 3 Audit, before implementing energy conservation measures. Ensure all measures implemented align with the long-term decarbonization goals.
- Conduct further analysis to refine optimal pathway for fuel switching. Natural Gas is currently used in various cooking equipment.
- Conduct further analysis to refine opportunity for lifecycle cost effective PV or the HCC roofs.
- Review and select the cost-optimal blend of off-site renewable electricity procurement options to eliminate all HCC Scope 2 emissions. Coordinate and refine with future electricity projections. Pursue carbon free energy procurement of district steam.
- Identify work plan to make the HCC net carbon neutral operations to align with BERDO emission standards. Continue voluntarily reporting HCC energy usage and emissions trends to BERDO.
- Expand advanced energy metering and submetering to internally track energy performance.
- Develop a tailored and formally adopted embodied carbon reduction strategy to deploy on future projects and ongoing operations.



### **Sustainability Framework**

Sustainable design and operation of MCCA facilities is a core driver for this organization. A structured sustainability framework that provides guidelines and quantifiable metrics can enable MCCA to track progress, set goals and targets, and measure success.

### Goals

Sustainability touches on every aspect of building, operations, and events at MCCA facilities. Currently, the MCCA does not have a comprehensive document to guide, track, and report sustainability progress. A holistic framework can provide sustainable guidance for built projects and vertical development, horizontal site and infrastructure projects, vendor services and operations, and event management. While numerous state and local regulations, policy drivers, codes, and priorities are in place, a consistent, comprehensive, and holistic framework to guide all four facilities does not exist. Further, there are many sustainability best practices that reach beyond minimum regulations and policies: energy efficiency, operational and embodied carbon, water conservation, waste management, health and wellbeing of building occupants, stormwater management, and biodiversity-- that enhance MCCA's investments and provide co-benefits in MCCA's role as a community steward.

### **Objectives**

- Understand, align, and meet or exceed MCCA's sustainability goals and metrics with current energy codes, regulations, public agency requirements, reporting frameworks and local/regional goals.
- Develop holistic, streamlined processes and consistent metrics for tracking, quantifying, and implementing sustainability initiatives, measures, and data collection and tracking across all MCCA facilities.

### Recommendations

- Continue to meet all requirements of the MA Energy Code, and the MA Stretch Code.
- Elect to design new construction, major renovations and interior fit-out projects to LEED Silver certifiable (in line with Executive Order 594 requirements) and elect to pursue full certification on all projects.
- Although optional for MCCA, continue tracking existing building performance in line with BERDO for consistency across MCCA facilities.
- Elect to establish formal sustainability guidelines and requirements for all MCCA facilities.
  - a. Benchmark the MCCA's sustainability initiatives against peer institutions and organizations.
  - b. Identify project-appropriate certification opportunities for building, site, and infrastructure projects.
  - c. Establish flexible, but measurable "good, better, best" guidelines for vendors and events management that target sustainability goals that are meaningful and aligned with MCCA's mission.
- Elect to create a clear messaging platform/strategy for communicating MCCA's "good work" and community stewardship in the form of a comprehensive website, tracking tools, and/or yearly sustainability reports.

### **Focus Areas**

A holistic sustainability framework should establish strategies, metrics, and set goals in the following areas:

**Energy Efficiency and Operational Carbon:** Increasing energy efficiency and reducing operational carbon with the goal of fully decarbonizing building systems is a primary goal for all MCCA facilities. An in-depth analysis of existing conditions and identification of high-level strategies is included in this report.

**Embodied Carbon:** Prioritizing tangible strategies for reducing embodied carbon in interior fit-outs, major renovations and vendor activities is also a goal for MCCA. While strategies will be unique to each condition and are often project specific, high-level strategies, metrics and targets are recommended.

Water Conservation and Rainwater Reuse: The conservation of potable water use (both inside and outside the facility) is also identified a priority for MCCA facilities. Reductions in potable water inside the building can be achieved via use of low-flow plumbing fixtures. Reductions in potable water consumption outside the building can be achieved with site design strategies that include the use of drought-resistant native vegetation. Rainwater reclamation, water sub-metering, and leak detection systems should also be considered with each project.

**Waste Management:** Construction waste reduction and waste diversion should be made a priority for any building and site related projects. From an operational waste perspective, the greatest source of waste at the convention centers and exposition halls is the waste generated by events. Targeting strategic opportunities for waste diversion, composting, and tracking of waste are ongoing measures at the HCC facility which can further be optimized and quantified.

**Health and Wellbeing of Building Occupants:** Enhancing the health and wellbeing of building occupants can be addressed in a variety of ways, focusing on providing access to daylight, provision of high-quality water and air, good acoustics, opportunities for socialization, access to healthy food, and the creation of outdoor spaces for recreation and enjoyment. Healthy material selections for building projects and vendors should be considered not only for embodied carbon considerations, but also with regard to the health and well-being of people who come into contact with these materials at all points and ethical sourcing considerations.

Landscape, Stormwater Management, Biodiversity, and Biophilia: The incorporation of landscape and low-impact development strategies can provide aesthetic enhancements and help mitigate stormwater management issues while also supporting biodiversity, providing recreational space, reducing the urban heat island effect, and elevating connections to nature and biophilia. Opportunities for urban farming, bee apiaries, or hydroponics should also be considered. Bringing biophilic elements into the building can enhance occupants' happiness levels, reduce anxiety, and contribute to wayfinding.



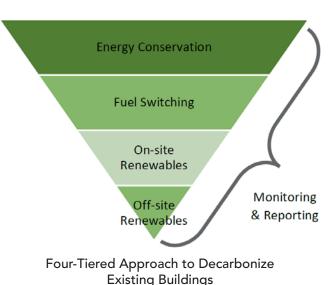
### **Operational Carbon**

A top priority for the MCCA is to achieve Operational Carbon Neutrality by 2030 for all four facilities.

### Goals

Set within a broader sustainability framework, a top priority for the MCCA is to achieve **carbon neutral operations.** Carbon neutral operations means all energy used on-site comes from carbon-free sources. This differs from Net Zero Energy operations (on-site energy demand equals on-site energy supply) in that it requires all purchased energy to come from carbon-free sources and does not require all energy to be generated on-site. Carbon neutral operations can be achieved by the following steps:

- **1. Energy conservation** to save money and reduce electricity and natural usage.
- **2. Fuel switching** to eliminate all remaining on-site natural gas usage (i.e., Scope 1 emissions).
- **3.** On-site renewable energy generation to save money and reduce demand for purchased electricity.
- **4. Off-site renewable energy procurement** to eliminate remaining energy-related GHG emissions.
- **5. Monitor and report** progress toward carbon neutral operations to maintain accountability and serve as a leader for the Commonwealth of Massachusetts and the events industry.



### Objectives

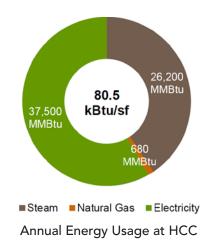
- Upgrade all MCCA facilities to achieve Operational Carbon Neutrality by 2030.
- Refine and develop the potential Energy Conservation Measures identified at each site; implement all costeffective, carbon reducing measures.
- Upgrade or retrofit all appropriate systems from natural gas to electric alternatives.
- Upgrade or retrofit all heat pump equipment to use low global warming potential (GWP) refrigerants.
- Maximize the cost-effective installation of on-site renewable energy.
- Procure Carbon-free Energy sources for all remaining purchased energy.
- Monitor and report decarbonization progress.

### **Existing Conditions**

The existing assessment for operational carbon can be divided into energy uses and energy supply.

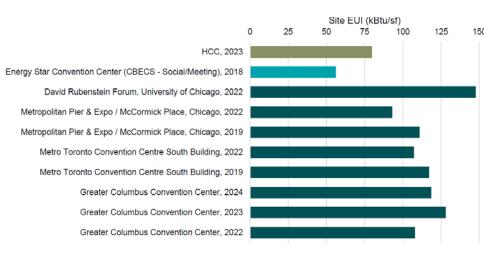
**Energy Usage:** Electricity is used for lighting and plug loads throughout the facility, ventilation, centralized cooling, and backup heating supply. District Steam is used for space heating and domestic hot water (DHW) via heat exchangers in the central mechanical room. Natural gas is used for cooking equipment in the kitchen.

In 2023, the HCC consumed approximately 37,500 million British thermal units (MMBtu) or 11,000 Megawatt hours (MWh) of electricity, approximately 26,200 MMBtu or 22,000 thousand pounds (kLbs) of steam, and approximately 680 MMBtu or 6,800 therms of natural gas, totaling 64,400 MMBtu per year. As an 800,000 square foot (sf) facility, 64,400 MMBtu translates to a site energy use intensity (EUI) of 80.5 thousand British thermal units per square foot (kBtu/sf).



### **Energy Usage Benchmark:**

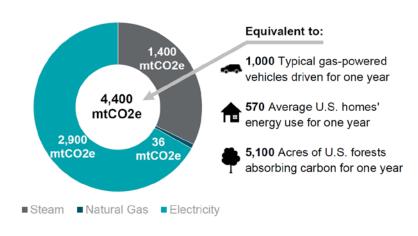
Benchmarking energy usage against peer facilities is a challenge because public data is limited for convention center and exhibition hall facility types across North America (and statistically significant trends are challenging due to the wide variability of energy uses). That said, when compared against a sampling of similar facility types located in similar climates that all publicly report energy performance, the HCC uses roughly 40% less energy per square foot than the average EUI of these facilities.



Existing Energy Usage Benchmark Against Peer Facilities

### **Existing Conditions** (continued)

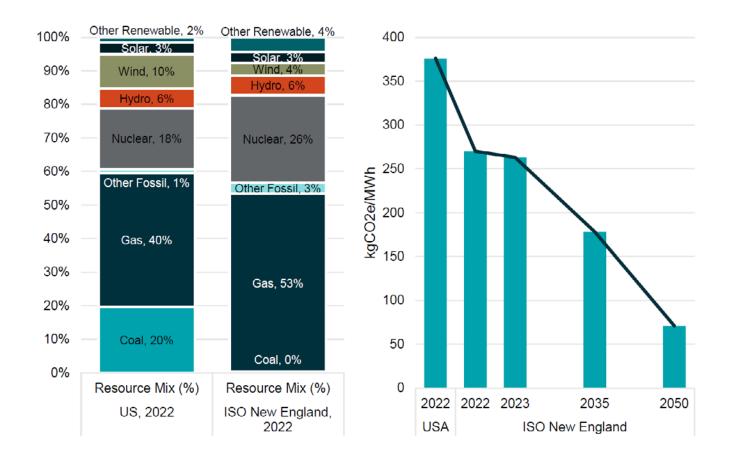
Energy Sources: Electricity is delivered to the site by Eversource, district steam is delivered by Vicinity Energy (formerly TriGen Steam / Veolia Energy), and natural gas is delivered by National Grid. Based on the greenhouse gas (GHG) emissions factors of 263 kilograms of carbon dioxide equivalent (kgCO2e) per MWh for electricity (ISO New England 2023), 55.2 kgCO2e per MMBtu for district steam (Vicinity Energy 2023), and 53.1 kgCO2e per MMBtu for natural gas (US EPA, national average), current BCEC energy usage equates to approximately 4,400 metric tons of CO2 equivalent (mtCO2e) per year.



Annual Operational GHG Emissions at HCC



HCC Roof | Photo credit: Touloukian Touloukian Inc.



Comparison of ISO New England Energy Mix and Emissions Factor to US Average

Energy Sources Benchmark: Currently, the HCC does not procure any renewable electricity beyond what is served by the ISO New England grid on average. For context, the 2023 emissions factor for ISO New England is about 30% less than the national average emissions factor of 376 kgCO2e/MWh (eGRID, 2022). As more renewable energy is added to the grid, the ISO New England emissions factor is projected to drop to 178 kgCO2e/MWh by 2035 and 71 kgCO2e/MWh by 2050 (BERDO, 2024). Natural gas emissions factors are not expected to change through the planning horizon.

### **Recent and Ongoing Efforts**

To reduce energy usage and supply energy from lower carbon sources, the MCCA has been implementing many efforts at the HCC.

**Lighting Retrofits and Controls Upgrades:** Some lighting upgrades have been implemented, but due to recent uncertainty about the long-term ownership of the facility not much has been completed. A controls upgrade project is funded and in the planning phases. This will include upgrading direct digital controls at the AHUs that are being replaced. The upgrade will also include switchgear controls with an intent to bring more detailed energy metering into the facility.

Virtual Power Purchase Agreement (VPPA): A VPPA is a type of contract for off-site energy procurement. The MCCA has finalized a contract worth 19,500 MWh per year of renewable electricity for a period of fifteen years. Although primarily intended to mitigate Scope 2 emissions from the BCEC, the VPPA is expected to exceed BCEC demand with some remaining supply to potentially offset other MCCA facilities. Additionally, the MCCA Board has authorized a second VPPA worth 20,000 MWh per year for fifteen years which is expected to further reduce Scope 2 emissions across all MCCA facilities.

**Demand Response:** As an energy cost savings measure, the HCC participates in the Eversource demand response program. When called to, the HCC can opt to shed non-critical loads during periods of high grid demand. This indirectly contributes to GHG reduction by supporting grid flexibility which reduces demand for natural gas "peaker plant" generating stations.

Climate Action Plan (CAP): The MCCA is developing a CAP for all MCCA facilities. While not directly a decarbonization strategy, the CAP establishes a formal GHG inventory and baseline for Scope 1 and 2 emissions. Adopting a CAP is an important step toward carbon neutral operations, as it establishes accountability and transparency for reporting progress toward an established goal.



Exhibition Hall D Prefunction | Photo credit: Signature Boston

### Recommendations

**Energy Conservation Measures (ECMs)** beyond recent and ongoing efforts at the HCC are identified in the recent ASHRAE Level 1 Audit Report (October 2024). Key ECMs include:

- 1. Upgrading, resetting or retro-commissioning various temperature and equipment controls.
- 2. Installing energy recovery, variable flow and occupancy/demand control capabilities to existing or replacement ventilation and pumping equipment.
- 3. Replacing some existing chiller capacity with a heat recovery chiller, to satisfy simultaneous heating and cooling demand in the summer.

Combined, the identified ECMs have the potential to conserve approximately 130 MWh of electricity and 9,500 MMBtu of steam per year. Refer to the ASHRAE Level 1 Audit Report for more details.

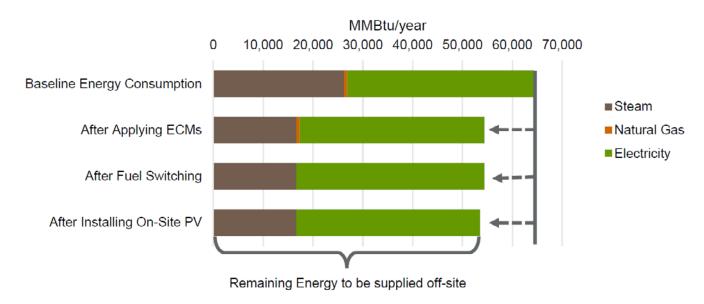
Fuel Switching from natural gas to electric alternatives falls under one category of natural gas use:

Natural Gas Use	Recommendation	Considerations
Cooking and catering include various electrical and natural gas equipment.	To decarbonize cooking and catering, it is recommended to replace the natural gas equipment with electric alternatives.	Further study is required to compile an inventory of existing gas-using equipment, identify like-for-like electric alternatives, and verify the local electric circuit capacity in the locations where the equipment would be installed.

On-site Renewables have not been evaluated in detail for the existing HCC rooftops. Preliminary analysis reveals that little of the roof area may be feasible for rooftop photovoltaics (PV) due to the high-rises located directly south of the site. However, there may be limited potential for PV at the northern edge and northwest corner of the roof. If this roof is verified structurally able to support PV, then potentially up to 200 kilowatts (kW) of capacity may be installed, enough to generate approximately 2% of present-day electricity demand at the HCC.

The combined effect of implementing the recommended strategies for energy conservation, fuel switching, and on-site renewable energy generation is a meaningful reduction in demand for off-site energy sources and the associated GHG emissions. Additional study is required to work out the details of some recommendations such as resolving constructability and refining the most life cycle cost effective pathway. Assuming all recommendations are implemented, the HCC may experience up to a 15% reduction in demand for off-site purchased energy and associated GHG emissions.

### **Recommendations** (continued)



Projected Impact of Recommended Strategies on Off-Site Energy Demand

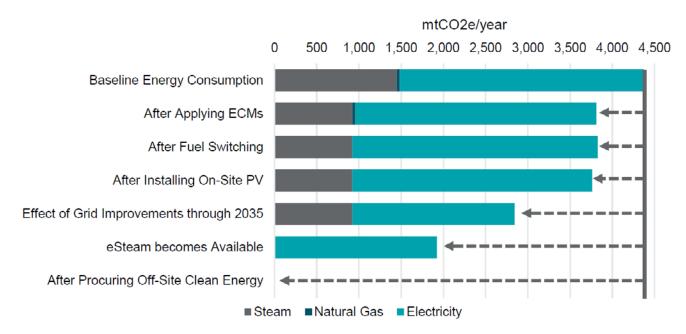
**Carbon-free Energy Procurement** is necessary for carbon neutral operations. As illustrated above, the combination of ECMs, fuel switching and on-site renewable energy generation can have a substantial impact on net energy demand, but there still is expected to be demand for approximately 36,000 MMBtu (10,600 MWh) of off-site purchased electricity and 17,000 MMbtu (14,000 kLbs) of off-site purchased district steam. The MCCA has entered into a professional services agreement for a Climate Action Plan (CAP) and a building decarbonization study with PowerOptions.

**Electricity Procurement:** With the purchase of off-site electricity comes associated GHG emissions. Over time, some of these annual emissions will reduce as the electric grid continues to get cleaner, but current projections show the electric grid will not be fully carbon-free within the timeframe of the MCCA's carbon neutrality target. Therefore, supplemental clean energy procurement is required. To do this at the HCC, the MCCA may consider any of the three pathways established by BERDO (which the MCCA is not required to follow, but is recommended for consistent implementation of GHG reduction strategies):

- 1. Enrolling into the Boston Community Choice Electricity and choosing the "Standard" or "Green 100" service.
- 2. Buying and retiring Mass Class I Renewable Energy Certificates, either unbundled or bundled as part of a PPA inside ISO New England.
- 3. Signing additional VPPAs outside ISO New England.

**Steam Procurement:** Additionally, carbon-free energy procurement for district steam is necessary to eliminate all Scope 2 emissions. Vicinity Energy has published a district steam electrification roadmap for Boston and Cambridge, illustrating plans to offer a cost-competitive zero carbon product, eSteam. When it becomes available, it is recommended MCCA consider procuring eSteam. The MCCA Board has approved the replacement of its electric boilers with more efficient electric boilers. The MCCA has the option to provide heating through these electric boilers as an alternative to Vicinity Energy district steam.

Procuring carbon-free energy in addition to implementing all site-level recommendations results in a clear pathway to carbon neutral operations at the HCC.



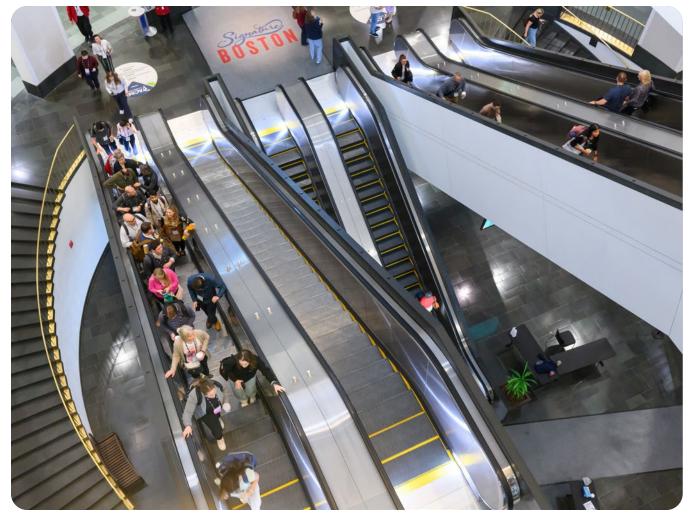
Projected Reduction in GHG Emissions from Recommended Strategies

Underscoring all this effort, Monitoring and Reporting progress toward carbon neutral operations through established and transparent channels builds trust and accountability for the MCCA to follow through on its goals. As stated, the MCCA is not required to adhere to BERDO. However, the associated emissions disclosure platform is well established for Boston area facilities to report to; has a straightforward reporting process; and contributes to the BCEC demonstrating local leadership. As such, it is recommended the MCCA continue reporting energy and emissions trend data to the BERDO platform moving forward.

Beyond BERDO, there may be additional opportunities to explore more granular energy data monitoring and reporting, such as time series data and submetering, through other platforms which may benefit the MCCA through greater insight into energy usage trends.

### Conclusion

In summary, the HCC is nearly fully electric except where natural gas is used for cooking. The HCC has a viable pathway to achieve carbon neutral operations by implementing a combination of energy conservation, kitchen electrification, modest on-site renewable energy generation, off-site renewable electricity procurement, carbon-free steam procurement through eSteam (when available) or utilizing the on-site electric boilers, and ongoing monitoring and reporting.



HCC Existing Ballroom | Photo credit: Signature Boston

### **Embodied Carbon**

Understanding, measuring and quantifying embodied carbon baselines will enable MCCA to establish reduction targets for all qualifying projects.

### Goals

When considering full carbon neutrality, embodied carbon – the GHG emissions associated with the production, transportation and installation of materials – is an essential yet historically underemphasized element however an increasing number of institutions and jurisdictions are starting to take embodied carbon measuring into account. There are many opportunities to effectively assess and reduce the embodied carbon of materials at all scales of facility design and operation. Prioritizing tangible strategies for reducing embodied carbon in interior fit-outs, renovations, new construction projects, and vendor activities is a goal for MCCA. While the specific strategies will be unique to each condition and project, establishing high-level strategies, metrics and targets for vertical development, horizontal development, and event management are recommended.

### **Objectives**

- Require whole project LCAs for all significant capital projects.
- Quantify embodied carbon for key materials.
- Require all significant capital projects to demonstrate a 10% reduction in embodied carbon.
- Calculate embodied carbon for all MEP and interior fit-out projects.
- Reduce embodied carbon for key materials.
- Understand additional embodied carbon impacts.

### Recommendations

- For major renovations, interior fit-out projects, new construction, or MEP upgrades more then \$1M: require a baseline and proposed LCA to be run.
- Identify a target **Embodied Carbon Reduction** (potentially 10% from baseline) as project goals.
- For all projects requiring more than 10 yards of concrete, require EPDs for each mix.
- For all projects with key interior materials (ACT, carpet, or drywall), require EPDs for each product type.
- Require teams to evaluate the embodied carbon of at least three different structural systems and explore a variety of bay sizes prior to the completion of SD.
- Explore opportunities for key uses of alternate materials, such as mass timber, in projects.
- Consider providing pre-vetted standard products which comply with EC reduction targets.
- Require each project team to identify opportunities for end of life product reuse.
- Require construction teams to track onsite utility and fuel use related to construction.

## **Energy Efficiency Summary Outline**

DMI has completed an ASHRAE Level 1 energy audit for the John B. Hynes Veterans Memorial Convention Center (HCC) to help determine the building's current energy performance and to identify energy savings measures to reduce operating costs. The audit is based on:

- 1985 construction drawings; and,
- A site visit to meet with facility operations staff and tour the facility to gain an understanding of how the building's HVAC&R systems operate; and,
- EMS screenshots of the HVAC&R systems.

The audit has focused on HVAC&R systems. The building envelope is expected to be the original construction and associated U-value, but due to the capital cost of upgrading the envelope, envelope ECMs have not been included.

A summary of utility consumption and costs for 2023 is below. HCC purchases steam from a district heating plant. The utility data is presented in building steam consumption; therefore, building energy use intensity does not account for steam generation efficiency. Natural gas is only used for kitchen equipment.

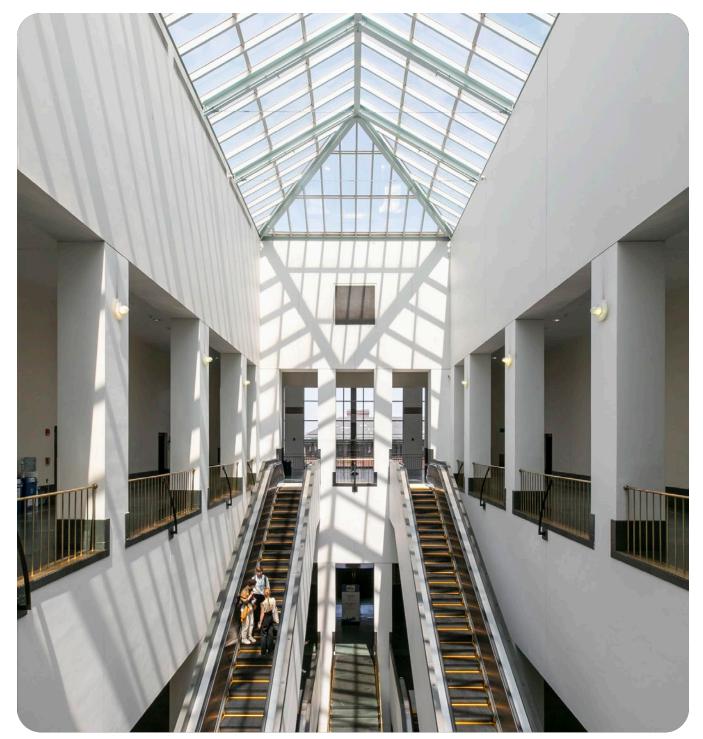
Billing	Area	Electric		Ste	am	Natur	Total EUI	
Period	Ft²	kWh	kBTU/ft²	Mlbs kBTU/ft²		Therms	kBTU/ft²	kBTU/ft²
9/2023-8/2024	800,000	11,151,360	47.6	24,741	30.9	4,650	0.6	79.1

Table 2 shows the energy use after applying an 80% steam efficiency to the imported steam based on the Energy Start source to site for district steam.

Billing	Area	Electric		Ste	am	Natur	Total EUI		
Period	Ft²	kWh	kBTU/ft²	Mlbs	kBTU/ft²	Therms kBTU/ft²		kBTU/ft²	
9/2023-8/2024	800,000	11,151,360	47.6	30,926	38.7	4,650	0.6	86.8	

This energy usage corresponds to an energy use intensity of 79.1 kBTU/ft²/year without steam efficiency or 86.8 kBTU/ft²/year with the steam efficiency. With steam efficiency the EUI is ~13% greater than the average EUI of 77 kBtu/ft²/year for entertainment/culture and social/meeting public assembly buildings in climate zone 5A according to the DOE's Building Performance Database.

The audit has identified a total of eleven energy conservation measures. The identified measures primarily include HVAC controls modifications. The site is at the beginning of a long-term HVAC controls system upgrade, so these measures could be incorporated into the existing controls systems for the short term and the new controls system for the long term. The annual electric, gas, carbon and cost savings for each measure are estimated and shown in the following table.



HCC escalators with skylight | Photo credit: Signature Boston

# **Energy Efficiency Recommendations**

Building Location		Energy Efficiency Measure		Annual Sa	avings Estimates		Cost	Simple Payback
building Location		Lifelgy Linciency Measure	Electric, kWh	Steam, MMBTU	\$*	CO <sub>2</sub> Tons	Estimate (\$)	(Years)
Kitchen	1	Kitchen Hood Controls	12,000	110	\$3,746	7.4	\$97,355	26.0
Facility	2	Condenser Water Reset	52,000	0	\$8,682	5.5	\$2,503	0.3
Facility	3	Hot Water Pump VFDs (See Note #4)	10,000	0	\$1,670	1.1	\$50,058†	30.0
Facility	4	HV Unit Energy Recovery	2,000	1,800	\$28,846	99.6	\$126,536	4.4
Loading Dock	5	Loading Dock CO/NO2 Controls	37,000	0	\$6,178	3.9	\$65,354	10.6
Kitchen	6	Kitchen & Loading Dock Walk-in Refrigeration Controls	71,000	0	\$11,855	7.6	\$125,145	10.6
Facility	7	Economizer Control Retrocommissioning (See Note #4)	58,000	1,120	\$27,425	68.0	\$105,122†	3.8
Facility	8	AHUs DAT Reset (See Note #4)	50,000	1,900	\$38,445	110.2	\$20,858†	0.54
Facility	9	CHW Pumping Retrocommissioning	9,800	0	\$1,636	1.0	\$12,515	7.6
Facility	10	CHW Supply Temperature Reset	22,000	0	\$3,673	2.3	\$6,257	1.7
Facility	11	Heat Recovery Chiller (See Note #4)	-196,000	4,600	\$40,138	233.0	-‡	-
*Based on a rate of \$0.311/kWh	and \$1.584/therm	Total	127,800	9,530	\$172,294	539.7	\$611,681	4.6††
		•	'	•	•	Total Project Co	st (3) <b>\$795,185</b>	

# **Fuel Switching Recommendations**

Item #	Title	Location	Description		Total Project Cost (3)	Permit Cost (4)
DC-01	Kitchen Electrification	Kitchens	Convert any gas kitchen appliances to electric appliances.		\$1,625,000	\$999,375
DC-02	Fuel Switch	Facility	Convert existing steam system to E-Steam.		See Note #5	See Note #5
				Grand Total:	\$1,625,000	\$999,375

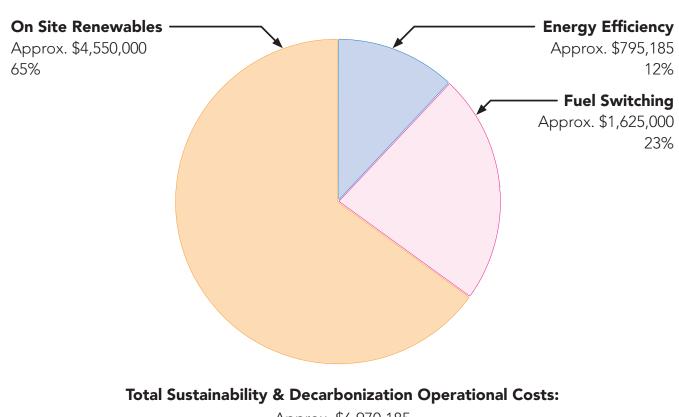
## **Renewable Generation Recommendations**

Item #	Title	Location Description		Total Project Cost (3)	Permit Cost (4)	
DC-03	Rooftop solar	Roof	Add 200 kW PV solar panels on the roof. See sustainability report for scope and limitations (e.g., shading analysis from neighboring high rises).		\$4,550,000	\$2,798,250
DC-04	VPPA	Facility	This is to be procured in 2025		See Note #5	See Note #5
				Grand Total:	\$4,550,000	\$2,798,250

### **Sustainability & Decarbonization Capital Costs**

### **Total Project Costs**

- Approx. **\$795,185** of Energy Efficiency Recommendations. From ASHRAE Level 1 Review. Escalated to FY 2026 (July 1, 2025).
- Approx. \$1,625,000 of Fuel Switching Recommendations. Escalated to FY 2026 (July 1, 2025).
- Approx. \$4,550,000 of Renewable Generation Recommendations. Escalated to FY 2026 (July 1, 2025).
- Off-site VPPA operation costs are not included.



Approx. \$6,970,185





HCC from Boylston Street | Photo credit: Signature Boston

- (1) **SGH Report:** Provided by the MCCA, a Capital Replacement Program outlining deferred maintencance projects scheduled through fiscal year 2029.
- **(2) MCCA FY2025 Capital Projects Budget:** Provided by the MCCA, a running list of Capital Projects including facility improvements, technology upgrades, and equipment purchases for fiscal year 2025.
- (3) Total Project Cost: Hard costs as determined by a cost estimator plus a 30% mark-up for soft costs.
- **(4) Permit Cost:** inclusive to total costs, this is 61.5% of the Total Project Cost. This number should be used for determining MAAB upgrade requirements per the 30% threshold set fourth by the State of MA.
- **Note #1:** Costs are to be identified from the 2020 SGH Report and/or the MCCA Capital Investment Report provided by the MCCA. Project costs have already been captured in the CCF as per CHMW coordination with MCCA and A&F.
- **Note #2:** See the 2020 SGH Deferred Maintenance Project List for a full list of additional project costs. These costs have already been captured in the CCF as per CHMW coordination with the MCCA and A&F. List of Key Deferred Maintenance Projects is a snapshot of the SGH and Capital Projects reports provided by the MCCA. These are highlighted as the more important projects which should be undertaken.
- Note #3: The 2020 SGH Costs have been escalated to July 1st 2025 (FY 2026).
- **Note #4:** This work is being performed in whole or in part by STV as part of a revised deferred maintenance report. The costs associated with this work is are captured in the CCF as per CHMW coordination with MCCA and A&F.
- Note #5: Operational budget adjustment.

# 08

# Climate Resilience

Understanding and addressing the climate risks facing the John B. Hynes Veterans Memorial Convention Center (HCC) is essential for ensuring its long-term resilience and operational continuity. Our review of the HCC's exposure to climate risk and resilience allows us to evaluate current and future climate-related hazards and provide recommendations to enhance the long-term resilience of these facilities, integrating protective measures into the facility's design and operations.

A comprehensive analysis was conducted to evaluate the HCC's climate implications and how its operations intersect with broader environmental factors. The facility's contributions to climate change were examined, focusing on topics such as greenhouse gas emissions, urban heat island effects, and impacts on local biodiversity.

An in-depth hazards review was also performed that considered extreme temperatures, winter weather, wind, seismic activity, and various types of flooding, including stormwater flooding, and extreme heat as the most critical risks. The risk of stormwater flooding is high due to increasing precipitation levels projected for the region, which may intensify by up to 20% by the 2070s according to the City of Boston's Climate Ready Boston report. Climate projections indicate that the number of days exceeding 90°F in Boston is expected to nearly double by the 2050s, placing additional strain on cooling systems during heatwaves and affecting occupant comfort.

Our findings underscore the necessity for immediate and long-term actions to mitigate these vulnerabilities, enhance the HCC's resilience to climate change, and align its operations with sustainability goals. By addressing these challenges proactively, the HCC can not only safeguard its operations but also serve as a model for sustainable facility management in the region.

# **Key Findings:**

- Upgrade stormwater management systems by regularly inspecting and maintaining drainage systems to ensure effective operation during storm events. Enhance stormwater drainage and trench systems, and consider implementing floodproofing measures to protect the facility from high-risk stormwater flooding events. Special attention should be given to lower levels, interfaces with I-90 and intake vents along Boylston Street. Consider site-level flood mitigation measures like flood berms and building-level measures such as deployable flood barriers.
- Monitor Groundwater Levels. Due to the moderate risk of groundwater flooding, begin monitoring groundwater elevations on-site and consider compartmentalizing critical rooms located in the lower levels to protect against potential flooding.
- Improve resilience to extreme heat by investing in energy-efficient cooling systems and incorporating landscape design elements that mitigate urban heat island effects. Enhance building envelope and insulation by improving roof insulation, converting dark-colored roofs to cool or green roofs, and increasing green spaces around the facility.

### **Climate Implications**

The HCC's operations have several climate implications, including contributions to greenhouse gas emissions, urban heat island effects, and impacts on local biodiversity. Addressing these implications is essential for reducing the facility's environmental footprint and enhancing its resilience to climate change.

### **Biodiversity**

The HCC is located in a dense urban neighborhood with extensive hardscape, limiting the presence of vegetation and reducing habitats for local flora and fauna. This lack of green space contributes to ecological degradation and diminishes the area's biodiversity.

#### Recommendations

- Plant native vegetation around the facility to support local biodiversity and create green corridors.
- Consider green roofs or rooftop gardens to provide habitats for local species and improve ecological health.

#### **Urban Heat Island Effect**

The HCC has a dark-colored roof, which absorbs more heat and contributes to higher ambient temperatures around the facility. This increases energy demand for cooling, impacts occupant comfort, and can pose health risks during heatwaves.

#### Recommendations

Convert the existing dark-colored roof to a cool or reflective roof to reduce heat absorption. Increase green spaces or plant shade trees around the facility to lower ambient temperatures and improve energy efficiency.

#### Greenhouse Gas Emissions

The HCC contributes to greenhouse gas emissions through energy consumption for heating, cooling, and lighting, as well as waste generation. Reducing these emissions is essential for mitigating climate change impacts (see Sustainability chapter for a detailed emissions and decarbonization discussion).

### **Review of Hazards**

An assessment of climate risks specific to the HCC was conducted, considering past events, current hazard levels, and future projections influenced by climate change. The highest risks identified are associated with stormwater flooding and extreme heat. Groundwater flooding and extreme wind pose moderate risks, while riverine flooding, coastal flooding, seismic activity, and extreme winter weather present low risks.

Given their high-risk levels, stormwater flooding and extreme heat are the priority hazards requiring immediate attention.

In addition to these, groundwater flooding presents a moderate risk. While the HCC is not immediately adjacent to major rivers, increased precipitation and potential rise in groundwater levels could lead to basement flooding, particularly affecting the lower levels where critical equipment is housed. Extreme wind poses a moderate risk as well; strong winds can cause damage to the building's exterior and increase the potential for windborne debris impacts. Extreme winter weather, though currently a low risk, could become more significant over time due to changes in precipitation patterns associated with climate change, potentially impacting structural integrity and operational continuity. Seismic activity and riverine flooding are considered low risks but should still be monitored to ensure comprehensive resilience. By acknowledging and monitoring these additional hazards, the HCC can remain prepared to respond if risk levels change.

Climate Risk	HCC
Riverine Flooding	Low
Coastal and Tidal Flooding	Low
Stormwater Flooding	High
Groundwater Flooding	Moderate
Extreme Heat	High
Extreme Winter Weather	Low
Extreme Wind	Moderate
Seismic	Low
Hail	Low

Summary Table of Climate Risks for HCC Renovation
Source: Climate Resilience Design Standards Tool (Resilient MA Action Team),
FEMA National Risk Index

## **Priority Hazards**

### Stormwater Flooding

The HCC faces a high risk of stormwater flooding due to increasing precipitation, projected to intensify by up to 20% by the 2070s according to the Climate Ready Boston report. The facility has experienced flooding in the past, particularly in the lower levels and loading dock areas, sometimes two to three times a year during intense rainfall events.

#### Challenges

• The facility's existing stormwater infrastructure may be insufficient to handle the projected increases in stormwater volume, posing risks to facility operations and structural integrity. The connection to the Massachusetts Turnpike, which is projected to be flooded in future climate scenarios, adds to the vulnerability.

#### Recommendations

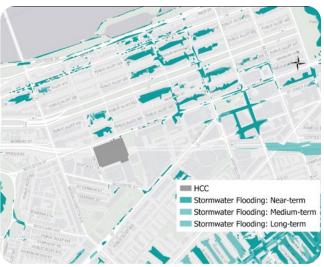
- Regularly inspect and maintain existing site drains and catch basins to ensure they are clear of debris and functioning properly, reducing the risk of blockage during storm events.
- Upgrade stormwater drainage and trench systems, such as increasing piping sizes or pump capacity.
- Implement floodproofing measures by compartmentalizing critical rooms in the lower levels and considering deployable flood protection along Boylston Street to prevent nuisance flooding during extreme storm events.
- Consider site-level flood mitigation measures such as flood berms, rhino walls, or tiger dams.

Location and Coastal Condition	Elevation (ft)	Notes, Source						
Comp	liance							
The facility is not in FEMA SFHA.								
Climate Change	Considerations	3						
Sea Level Rise Inundation (MHHW+5ft)	16.2	NOAA						
Sea Level Rise Inundation (MHHW+10ft)	21.2	NOAA						
Storm Surge Flooding – Category 3 Hurricane	25.5	NWS SLOSH Model						
Storm Surge Flooding – Category 4 Hurricane	32.5	NWS SLOSH Model						
Coastal Flood Resilience Overlay District	17.5	BPDA Zoning Article 25A						
Current Structural Conditions								
HCC Lower Level (critical equipment)	13.0 to 22.4	Drawings provided to TT						
HCC Plaza Level	34.4	Drawings provided to TT						

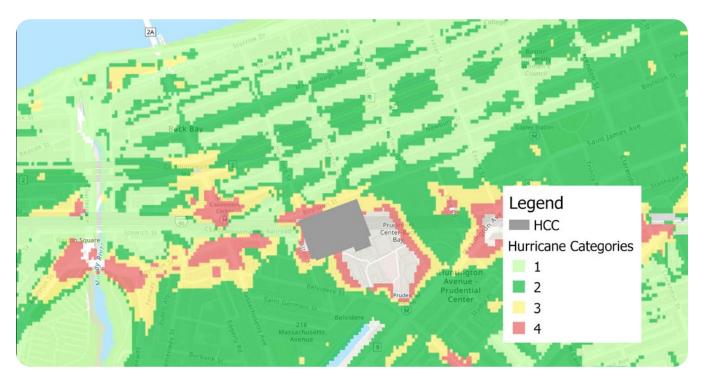
Elevations Related to Flood Mitigation Design at HCC (Boston City Base Datum)



Projected Coastal Flooding Driven by Sea Level Rise and Storm Surge, Source: Massachusetts Office of Coastal Zone Management



Stormwater Flood Map, Source: City of Boston. Climate Ready Boston Map Explorer: Stormwater Flooding and Ponding Map



Worst-Case Scenarios of Storm Surge Inundation, Massachusetts Office of Coastal Zone Management Massachusetts Sea Level Rise and Coastal Flooding Viewer. Woods Hole Group, 2022

### **Priority Hazards** (continued)

#### Extreme Heat

Climate projections indicate that Boston will experience an increase in both average temperatures and the frequency of extreme heat events. By the 2050s, the number of days exceeding 90°F is expected to nearly double. The HCC's existing cooling systems may struggle to meet future cooling demands during heatwaves, affecting occupant comfort and increasing energy consumption.

#### Challenges

The facility's dark-colored roof contributes to higher heat absorption, exacerbating indoor temperatures and increasing cooling loads. The lack of green spaces around the facility limits natural cooling effects.

#### Recommendations

- Convert the existing dark-colored roof to a cool or reflective roof to reduce heat absorption.
- Consider adding green roofs to structurally capable areas to provide insulation, reduce the urban heat island effect, and manage stormwater runoff.

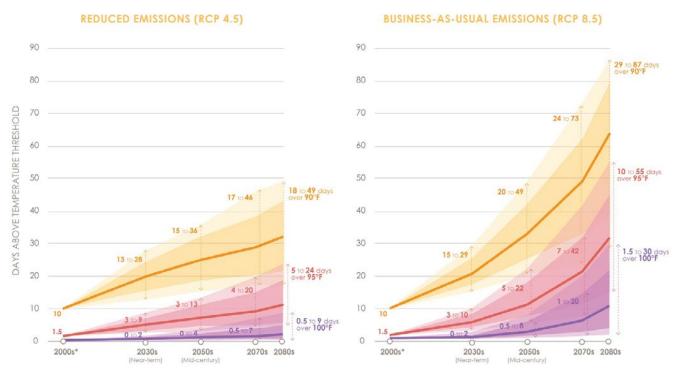
### Conclusion

The climate risk and resilience assessment for the HCC has identified significant risks, particularly from stormwater flooding and extreme heat. By implementing the recommended strategies, the facility can enhance its resilience, ensuring operational continuity, occupant safety, and alignment with sustainability goals. Addressing these risks proactively will also position the HCC as a leader in sustainable facility management within the region.

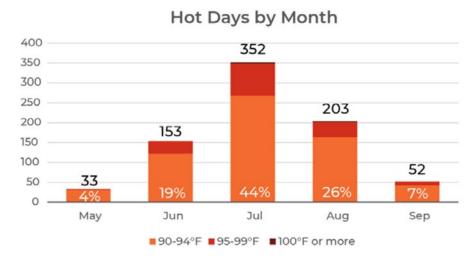
#### **Next Steps**

- Prioritize actions by focusing on high-risk areas, especially upgrading the stormwater management systems and enhancing cooling systems to handle extreme temperatures effectively.
- Integrate resilience strategies into planning by incorporating them into capital improvement plans and maintenance schedules, ensuring that upgrades are systematically planned and budgeted.
- Monitor and update risk assessments and strategies based on the latest climate projections and technological advancements to remain adaptive to changing conditions.
- Engage stakeholders by collaborating with local authorities, stakeholders, and the community to support broader climate resilience efforts and share best practices.

By proactively addressing these climate risks, the HCC can safeguard its operations and infrastructure, contribute to a sustainable and resilient future, and set an example for similar facilities in the region.



Projected Hot Days for Boston Regarding a Reduced Emissions Scenario (RP4.5) (Left) Versus a Business-As-Usual Scenario (RCP8.5) (Right), Source: Heat Resilience Solutions for Boston



Average Number of Days Exceeding 90°F in Boston from 1960-2020 Source: Heat Resilience Solutions for Boston

# 09

# **Emergency Response**

The John B. Hynes Convention Center (HCC) is a valuable facility in both Boston's economic ecosystem and the Commonwealth's emergency management infrastructure. This review identifies key opportunities to enhance the HCC's emergency response and highlights gaps that need to be addressed to ensure it can effectively support the community during critical times.

The HCC has demonstrated flexibility in supporting emergency response, notably when it was converted into a COVID-19 vaccination site from April to September 2021. As a large convention center with extensive infrastructure and a strategic location in Boston's Back Bay, the HCC is well-suited for several emergency response roles such as:

#### 1. Emergency Distribution Hub

The HCC's extensive loading docks and storage spaces make it ideal for distributing emergency supplies, medical equipment, and other resources on a city or regional level. Its proximity to major transportation routes facilitates efficient logistics operations.

#### 2. Temporary Medical Facility

With a proven ability to quickly adapt into a medical facility, as demonstrated during the COVID-19 vaccination campaign, the HCC can provide temporary healthcare services during public health crises and mass casualty events.

### 3. Community Warming and Cooling Center

The HCC's HVAC systems and large indoor spaces make it a strong candidate for serving as a climate-controlled refuge during extreme weather conditions like heatwaves or cold snaps, providing comfort and safety for vulnerable populations.

# **Key Findings:**

- The current backup power system only supports essential life safety functions, such as emergency egress lighting and limited building systems. In the event of a grid outage, there is no backup power for air circulation, heating, cooling, or most lighting, which severely limits the facility's ability to operate as an emergency shelter or extended-stay facility. Expanding backup generator capacity and fuel storage is critical to enhancing the HCC's resilience during long-duration power outages.
- Operations should continue to evaluate additional demands and uses when the facility is fully occupied or empty.

### **HCC Emergency Response Context**

While the Massachusetts Convention Center Authority (MCCA) operates the John B. Hynes Convention Center (HCC) and possesses significant infrastructure, it does not have a formal emergency response mandate. The designation of specific emergency response roles and responsibilities for the HCC would be determined by state agencies responsible for emergency management and planning, such as the Massachusetts Emergency Management Agency (MEMA). Moreover, in the Commonwealth, oversight of shelter operations would be governed by the city, State, or Federal government, and managing these activities would not be the responsibility of the MCCA. Emergency services would be provided by operational organizations like the American Red Cross or National Guard. This assessment focuses on the material and operational capacities of the HCC, recognizing that any expansion into emergency roles would require coordination with external authorities, and the need for external parties to establish the any formal emergency response designation and work closely with the MCCA to ensure organization alignment and preparedness. This study did not review current MCCA's operational emergency procedures. The MCCA is particularly well-equipped for logistical support and command center functions but faces challenges in roles that involve providing direct care and services to crisis-affected populations due to contractual and operational constraints.

## Identified Gaps in Emergency Response Capacity

While the HCC has significant potential to serve in various emergency response roles, several critical gaps limit its ability to fully realize this potential as outlined below.

### **Emergency Response Gaps**

- The HCC's primary operational focus on hosting events requires careful alignment with emergency response roles.
  Adjustments to staffing and logistical planning are needed. Alternative staffing plans, external personnel, and
  specialized training would be required for roles such as shelter management, emergency supply distribution, and
  community resource coordination. MCCA staff would support external agencies in response efforts, and not lead
  or provide front line roles in a emergency response scenario.
- The current backup power system supports only essential life safety functions. In the event of a grid outage, there is no backup power for HVAC systems, general lighting, or communication networks. This limitation hinders the facility's ability to operate effectively during extended power outages. This introduces challenges, as maximizing space utilization requires moving resources and people vertically within the facility. Emergency power would be necessary to support this vertical movement. Without functional elevators or lifts, meeting building codes and ADA requirements would be difficult.
- While the HCC has space for temporary housing, significant constraints limit its ability to serve as a long-term emergency shelter:
  - The facility lacks sufficient shower facilities for large-scale sheltering. While the loading dock area can accommodate portable showers and toilets, structured schedules and additional staffing would be required to manage these services effectively during emergencies.
  - The current number of accessible restrooms and spaces is insufficient for large-scale sheltering events. Additionally, accessibility issues with entrance doors on Boylston Street pose challenges. MCCA would need to invest in portable accessible facilities and improve signage to meet ADA requirements.

- There is no public parking available on-site. Shelter residents driving to the site must use public parking garages, which may be inconvenient or impractical.
- -Based on current business practices, there are some circumstances which the HCC could not to be used as a shelter given contracts with clients or labor contracts.

### **Recommendations for Enhancing Emergency Response**

To ensure the HCC's emergency response capabilities are fully aligned with the facility's potential roles, several key actions are outlined below.

#### **Recommended Actions**

- Conduct a critical load study to identify essential systems that require backup power (HVAC, lighting, communication systems), and plan for the installation of additional generators and fuel storage. This will enable the facility to function effectively during extended power outages, ensuring continuity of essential services like heating, cooling, air circulation, and lighting.
- Retrofit key areas to accommodate emergency sheltering needs, including adding hookups for mobile shower and restroom facilities, expanding accessible spaces, and improving signage for emergency operations.
- In the event that the facility is designated for an emergency response role, it may be necessary to provide specialized training for staff in preparation for emergency scenarios. Cross-training among staff will ensure operational flexibility during emergencies.

### **Limitations for Certain Emergency Roles**

While the HCC can play an important role in many emergency response scenarios, it is less suited for use as a community storm shelter during events like hurricanes or severe flooding. Its extensive glass surfaces, limited accessibility, and vulnerability to flooding in the Back Bay area make it less ideal for such roles without significant infrastructure upgrades. Additionally, the facility's location and design pose challenges for sustained shelter operations in the event of severe weather.

### Conclusion

The HCC holds significant potential to serve as a critical asset in the Commonwealth's emergency response efforts, especially in areas such as resource distribution, temporary medical facilities, and climate-controlled sheltering. However, to fully realize this potential, the facility must address key infrastructure limitations—particularly in backup power and sheltering capacity. By addressing these challenges, the MCCA can ensure that the HCC remains a resilient and adaptable resource for both Boston and the Commonwealth during future emergencies.

# 10

# **Transportation**

The HCC transportation infrastructure requires enhancements for accessibility, efficiency, and convenience. Key findings include dedicated loading zones, a 5-minute pick-up/drop-off zone, ADA-compliant ramps, improved bike parking and awareness, long term planning for truck marshalling, real-time transit screens, and consistent MCCA shuttle schedules.

The transportation infrastructure near and on-site of the HCC has several areas for future development aimed at enhancing accessibility, efficiency, and convenience for all users. Key recommendations for pedestrian infrastructure include collaborating with the City of Boston to improve nearby ramps and crosswalks to ensure ADA compliance, including detectable warning panels where necessary.

The HCC should consider installing short-term bike racks around the Site and constructing a long-term bike cage consistent with City of Boston Bike Parking Guidelines. Promoting cycling as a viable commuting option through increased awareness about available bike parking and integrating it with main entrances, as well as enhancing signage and developing better access routes for cyclists, will improve safety and usability.

# **Key Findings:**

- Designate internal zones to reduce street congestion with dedicated loading spaces.
- Change the taxi stand to a 5-minute pick-up/drop-off zone.
- Evaluate the long term viability of the truck marshalling yard in Allston/ Brighton; explore other long term permanent options.
- Conduct a deeper ADA compliance review of ramps, specifically warning panels, collaborating with the City of Boston.
- Provide long-term and short-term bike parking per City guidelines; boost awareness, signage, and access for cyclists.
- Explore real-time transit screens in the main lobby to inform guests and employees about transit options.
- Work with MBTA to enhance bus stops near the site, consider transit subsidies for employees.
- Consider conducting a feasibility study to explore the benefit of a consistent and active MCCA shuttle bus system.
- Current drop off lane adjacent to Boylston Street is underutilized. Pursue landscape and plaza options that improve ground floor activation and pedestrian activity.

# 1. Pedestrian Infrastructure 🏂

#### Summary

- The sidewalks around the vicinity of the HCC are generally compliant with the City of Boston Guidelines providing safe and accessible environments for pedestrians.
- Crosswalks and ramps are provided at intersections abutting the site and are generally in good condition.

#### Findings & Recommendations

• Several locations do require a deeper ADA compliancy review related to ramps, specifically lack of detectable warning panels. Sidewalks under the jurisdiction of the City of Boston would benefit from a coordinated effort between City staff and MCCA, where MCCA can highlight high use pedestrian corridors relevant for HCC for the city to address and prioritize as they execute ADA/ramp reconstruction and improvement efforts.

## 2. Bike Infrastructure

### Summary

- The bike infrastructure around the HCC includes buffered bike lanes on Boylston Street and Dalton Street, both newly constructed.
- Bluebikes stations are conveniently located within a quarter mile, including one at Boylston Street at Fairfield Street, which is within 300-feet of the main entrance.
- The Site does not offer any long-term or short-term bike parking.

### Findings & Recommendations

- Both long-term and short-term bike parking spaces should be provided, in styles that are compliant with the City of Boston Bike Parking Guidelines.
- The MCCA should work on increasing awareness and visibility of bike parking areas, improving signage and access routes to better accommodate cyclists, and promoting cycling as a feasible commuting/access option.

## 3. Passenger Vehicle Access and Parking



#### **Summary**

- The Surrounding the HCC, metered parking is allowed on Boylston Street and some portions of Dalton
- The HCC lacks internal passenger pick-up/drop-off zones, requiring these activities to take place on city

#### Findings & Recommendations

- Opportunities include designating internal zones to reduce street congestion. Recommendations involve establishing dedicated internal loading zones. The MCCA should consider working with the City of Boston to change the taxi stand to a 5-minute pick-up/drop-off zone.
- The HCC provides only six parking spaces dedicated to security, cleaning, and maintenance staff on Cambria Street, which are fully utilized. An additional 6 tandem spaces are rented from the Sheraton Hotel for employees and contractors.
- Event visitors rely on off-site parking at nearby garages, such as the Back Bay Hilton and Prudential Center.



Shuttles Blocking Access Aisle Exit | Photo credit: VHB



Main Entrance on Boylston Street | Photo credit: VHB

### 4. Transit and MCCA Shuttle



### Summary

- The HCC is well-served by multiple MBTA public transportation options, including multiple branches of the Green Line and local bus route 55.
- The MCCA currently operate limited shuttle buses on an on-call basis only, no schedule or route definition.

### Findings & Recommendations

- The MCCA could explore providing real-time transit screen inside the main lobby, which helps inform guests and employees of transit opportunities.
- The MCCA should work with the MBTA to enhance the MBTA Bus stops near the Site to include shelters and other facilities. Additional TDM strategies related to public transit are available for implementation, such as providing transit subsidies to employees/staff.
- MCCA shuttles are not provided on a consistent schedule or route, which makes it unreliable for trip planning. MCCA could consider conducting a feasibility study to explore the benefit of a consistent and active MCCA shuttle bus system. Although HCC does have great access to public transit, an additional, or supplemental connection to some larger hubs may be considered a benefit to employees and visitors alike. The shuttle system could also be utilized for quest transfers between MCCA facilities (BCEC, HCC and BCG primarily) in case of event overflow spaces or parking overflow needs. A deeper review of transportation data points is needed to allow for detailed shuttle schedule and routing recommendations.



Buffered Bike Lane on Boylston Street | Photo credit: VHB

# 5. Trucks/Service and Loading

#### Summary

- The HCC's off-street loading facility efficiently manages event logistics with 14 loading docks actively supervised by a dock manager.
- Loading docks are accessed from dedicated truck routes on Massachusetts Avenue, which helps maintain safety by minimizing conflicts between trucks, pedestrians, and cyclists.
- The HCC uses an off-site marshalling facility in Allston/Brighton during large events.

### Findings & Recommendations

• The Allston/Brighton lot serves truck marshalling for the Hynes and is currently being leased. We suggest that the MCCA evaluate other long term options for truck marshalling in case the existing Allston/Brighton lot becomes unavailable. Long term options could also include area large enough to serve the BCEC if a potential BCEC Expansion requires additional truck marshalling areas.



Hynes Garage Loading Area | Photo credit: VHB

### **Transportation Demand Management (TDM)**

Transportation Demand Management (TDM) strategies aim to reduce vehicle miles traveled, increase travel choices, improve sustainability, and support economic development by enhancing transportation system efficiency.

### **HCC Transportation Programs**

A review of HCC transportation programs, concluded the following:

- HCC employee and visitor auto mode share ranges between 35% and 55%, depending on event type (local/regional draw vs. national/international draw).
- HCC's current TDM program includes charging market rate parking fees to visitors, allowing flexible work schedules and telecommuting for some employees, and providing no on site parking for visitors/guests.
- Additional TDM strategies are available to MCCA to help reduce reliance by HCC visitors and employees on single occupancy vehicles.
- Massachusetts has committed to achieving net-zero greenhouse gas (GHG) emissions by 2050. Aligned with these policies in decarbonizing the statewide transportation sector, the MCCA is required to incorporate or may choose to voluntarily commit to Executive Order 594, Fleet conversion, EV charging, Base energy code as well as city of Boston policies and regulations on EV readiness and NetZero code. Additionally, third party guidance such as USGBC/LEED and GBCI Parksmart may also be appropriate to pursue.

### **Existing TDM Measures at HCC**

The following is a list of TDM measures provided by HCC to help reduce reliance on single-occupancy vehicles by employees and visitors:

- Charging market rate parking fees to visitors.
- No parking provided on-site for visitors/guests.
- Allowing flexible work schedules and telecommuting for a limited group of employees (administrative staff have option to work 3 days a week in the office with 2 days from home).

### **Best Practices in TDM**

TDM as a practice supports actions to reduce single occupancy vehicle trips, with the goal of encouraging carpooling/vanpooling, commuting by bicycle and walking, as well as increased use of area's public transportation system and other sustainable modes by employees and visitors.

Best practices in TDM employed locally with Boston area agencies, institutions and private developers, and available to MCCA for consideration, are summarized into the following groupings:

#### **TDM Resources/Support Services**

- Designation of an on-site Employee Transportation Coordinators (ETC)
- Joining a Transportation Management Associations (TMA)
- Marketing and Promotion Materials

#### **Public Transportation Strategies**

- Setting aside pre-tax funds for purchase of transit passes
- Subsidizing monthly transit passes

#### Parking Strategies

- Charging market rates for parking
- Limiting parking supply at destination
- Providing preferential parking spaces for carpools/vanpools
- Access to Ridematching programs

#### **Bicycle and Pedestrian Amenities and Incentives**

- Long-term and short term bike parking on site
- On-site showers, lockers and changing rooms
- Bicycle repair station
- Bluebikes
- Subsidized Bluebikes membership
- Emergency ride home
- E-bicycle / e-cargo bike program
- Multimodal transportation subsidy
- Subsidized carshare

#### Flexible Work Schedules and Telecommuting

# 11

# **Capital Planning**

Capital planning for the existing HCC highlights opportunities that enhance landscape and pedestrian experiences around its public facing exterior faces, modernize wayfinding and digital signage with ROI opportunities, and key operational improvements that advance the efficiency of facility functions. In the beloved Boston Back Bay neighborhood, this facility has an opportunity to make stronger connections to the community through local vendor retail and public landscape plazas.

#### **Street Activation**

The facades of the HCC along Boylston Street and Dalton Street are lacking in vibrancy and are largely opaque and unwelcoming. In order to better serve the community, infilling the Boylston Street loggia with local vendor retail shops and a public plaza will transform a rather desolate pedestrian zone along an active Boylston Street corridor – making stronger urban connections to the east and west. Retail on both ends of the loggia will be infilled with retail uses to create a consistent pedestrian experience.

Reprogramming the Exhibition Hall B into additional meeting rooms and convener/breakout spaces will not only respond to market demands, but also create opportunities for increased ROI. Revitalized programming can open the interior to the exterior with expansive glass and social spaces that are more connected to the experiences of the Back Bay. Adding digital signage can create advertising and ROI opportunities with visibility to highly occupied areas such as the Hynes Auditorium garage, Hilton Boston Back bay, Sheraton Boston Hotel, and One Dalton. Overall, the improved landscaping and streetscape spaces on both facades elevate the streetscapes to feel more comfortable and exciting.

# **Key Recommendations:**

- Meeting Rooms: MCCA staff and Signature Boston have identified a lack of meeting space throughout the facility that are necessary to meet market demand. Aside from the Exhibition Hall B conversion above, convert the rarely used cafeteria into meeting rooms and locations along the corridors facing Boylston Street into convener/breakout spaces.
- **Digital Signage:** The Hynes has very outdated wayfinding and signage throughout the facility. Key areas for improved and new signage have been outlined with the goal of improving ROI and aiding with overall event communication.
- Truck Marshalling: Long term viability of the truck marshalling yard in Allston/Brighton is not clear. It is recommended that the MCCA explore other long term permanent options. See Transportation Section for additional information.



# **List of Projects and Cost Estimates**

Item #	Title	Location	Description	Investment (1)	Experience (2)	Complexity (3)	Impact (4)	Priority (5)	Total Project Cost (6)	Permit Cost (7)
			Signage						\$4,946,215	\$3,041,922
P01	Digital Signage	Facility	Add digital signage to various locations throughout the facility. See AV report for scope and screen cost. See engineering reports for Mechanical and Electrical scope.	\$\$	000	^^	High	1	\$4,946,215	\$3,041,922
			Food & Beverage						\$0	\$0
-	-	-	-	-	-	-	-	-	-	-
			Meeting Rooms						\$23,807,676	\$14,641,720
P02	New Meeting rooms	Cafeteria	Convert existing cafeteria and lounge to meeting rooms. See engineering reports for MEP/FP scope.	\$	00	^^	Medium	1	\$4,082,531	\$2,510,756
P03	Ex-hall B Conversion	Ex-Hall B	Convert Ex-Hall B to meeting rooms, breakout spaces, and kitchen prep.  See engineering reports for MEP/FP scope.	\$	00	^^	Medium	1	\$18,053,538	\$11,102,925
P04	Level 2 Breakout Space	<b>s</b> Level 2 Hall	Add breakout spaces to the Boylston Street Hallway on Level 2. See engineering reports for electrical scope.	\$	QQ	^^	Medium	1	\$1,671,607	\$1,028,038
			General Infrastructure						\$12,084,532	\$7,431,987
P05	Boylston Street Modifications	Level 0 & 1 Boylston Street Facade	Infill Boylston Street loggia on Level 0 and Level 1 to include community retail space and meeting room breakout spaces. Expand the Boylston Street entrance lobby. See engineering reports for structural & MEP/FP scope.	\$\$	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	^^^	High	1	\$8,880,966	\$5,461,794
P06	Truck Marshalling	Unknown	Find and purchase new land for Hynes Truck marshalling should the existing Allston lot become unavailable.	\$\$\$\$	$\heartsuit$	٨	High	1	Market Dictated	Market Dictated
P07	Landscape Improvements	Boylston Street Loggia	Implement landscape improvements along the Boylston Street loggia and reconfigure the vehicular drop-off drive. See traffic and landscape reports for scope.	\$\$	000	۸۸	Medium	2	\$2,853,864	\$1,755,126
P08	Landscape Improvements	Dalton Street	Implement landscape improvements along Dalton Street. See landscape report for scope.	\$\$	000	^^	Medium	2	\$349,702	\$215,066
							Grand T	otal:	\$40,838,423	\$25,115,630

## **Project Priority & Total Cost**

In order to help prioritize the list of capital projects, the Team created a series of categories which culminate in a prioritization level of 1-3 where (1) is the highest priority and (3) is of a lower priority.

Priority is determined by cross referencing four categories:

- (1) Investment: how much the project will cost.
- (2) Experience: level of improvement for user experience.
- (3) Complexity: how disruptive the project would be to ongoing operations.
- (4) Impact: how effective the project will be, derived by cross refencing ROI and User Experience.
- (5) **Priority:** by cross referencing the above categories across the listed projects, a prioritization level is determined with the intent of framing future planning studies, schedules, and budgets.
- (6) Total Project Cost: Hard costs as determined by a cost estimator plus a 30% mark-up for soft costs.
- **(7) Permit Cost:** inclusive to total costs, this is 61.5% of the Total Project Cost. This number should be used for determining MAAB upgrade requirements per the 30% threshold per the state of MA.

# **Existing Photos**



Ballroom | Photo credit: Signature Boston



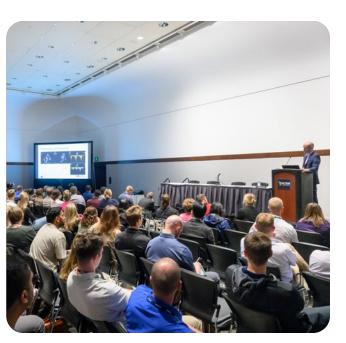
Rotunda | Photo courtesy of Signature Boston



Boylston Street Hallway | Photo credit: TT Inc.



Registration | Photo credit: Signature Boston



Meeting Room | Photo credit: Signature Boston



Dalton Street Corner | Photo credit: Google Earth

### **Capital Projects Overview**



American Dream Meadowlands, NJ | Credit: SNA Displays

**P01 | Digital Signage** The effectiveness of Digital-Out-of-Home (DOOH) advertising lies in its ability to reach audiences in high-traffic areas, at specific times, in a highly visual format, increasing brand awareness and recall.



Northern Ave, Seaport Blvd, Boston | Photo Credit: TT Inc.

P05/P07 | Community Retail Streetfront New retail frontage will be activated by informal caféstyle seating and by improved plant beds. This will require a shortening of the existing drop off lane. Modifications to drop off lane to be coordinated with the Fire Department and the local building official, see appendix for memo.



Meeting Room Precedent | Photo credit: Adobe Stock

**P02/P03 | Meeting Rooms** Multiple areas within the Hynes will be converted into meeting rooms to be used for small gatherings and presentations. Each meeting room will have a digital screen (See AV).



Inman Square, Cambridge | Photo Credit: KMDG

**P07** | **Plaza** Improvements to the new paved plaza space in front of the retail zone will provide an accessible, open, and inviting public space. Overall grades will be reduced to 2% or less in any direction, and this will support informal caféstyle tables and chairs for convention center quests to gather.



Aftershock by OKB Architecture | Photo Credit: Art Gray

**P03/P04/P05 | Breakout Spaces** The breakout rooms on levels 1 and 2 will be versatile spaces designed for smaller group discussions, workshops, or meetings, providing a more intimate setting away from the main event.



Suffolk University | Photo Credit: KMDG

**P07 | Improved Plant Beds** The existing plant beds and current street trees will remain to allow venting from the I-90 tunnel below. However, a new planting approach and layout will be provided, which will include native shrubs, grasses, and perennials that are appropriate to the rugged urban conditions of Boylston Street.



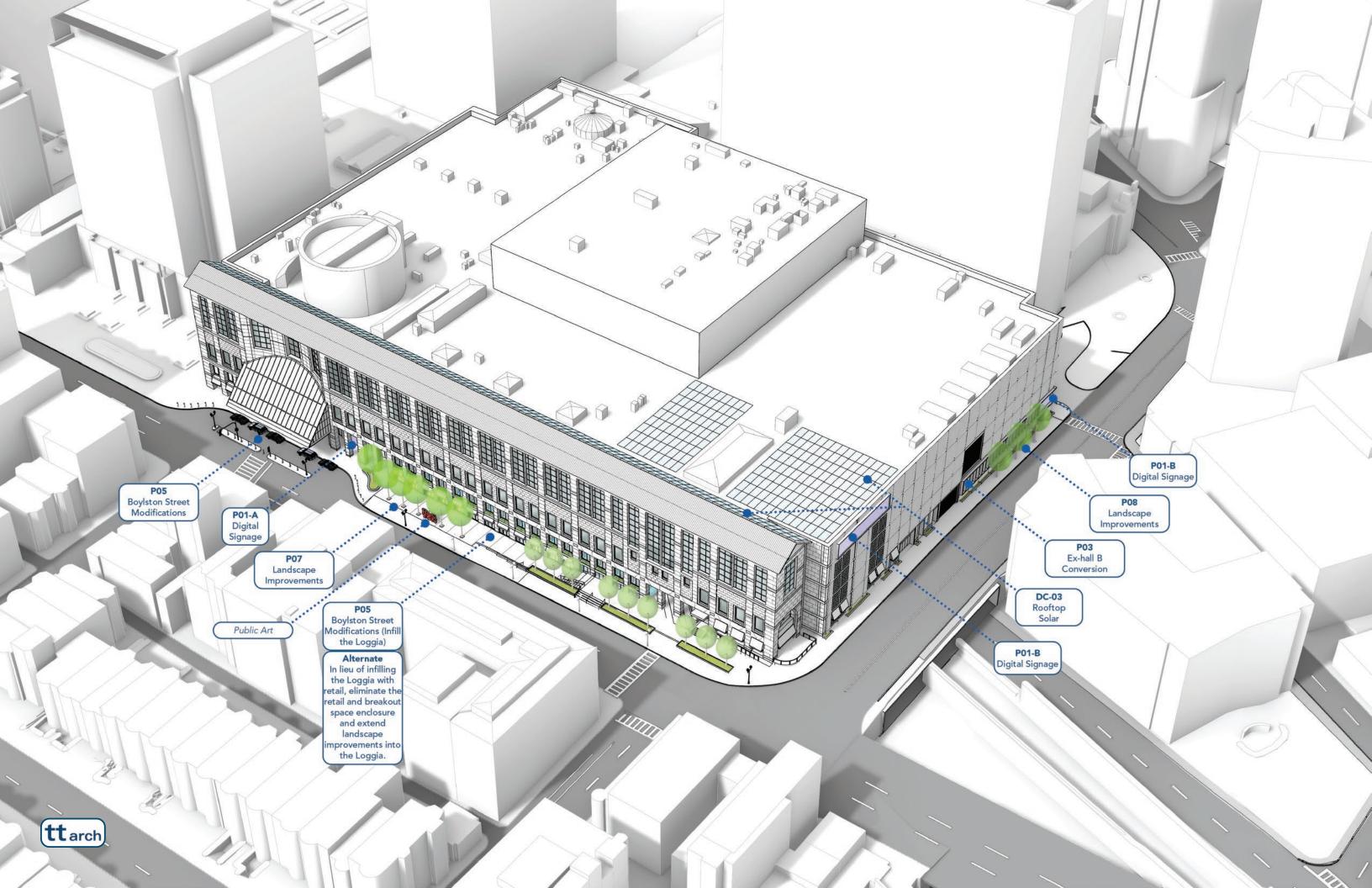
Existing Kitchen Prep Space | Photo Credit: TT Inc.

**P03 | Kitchen Prep** Within the Ex-hall B conversion, there will be a kitchen prep space connected by a service hallway to the meeting rooms within this zone. This streamlines and conceals the food service operation.

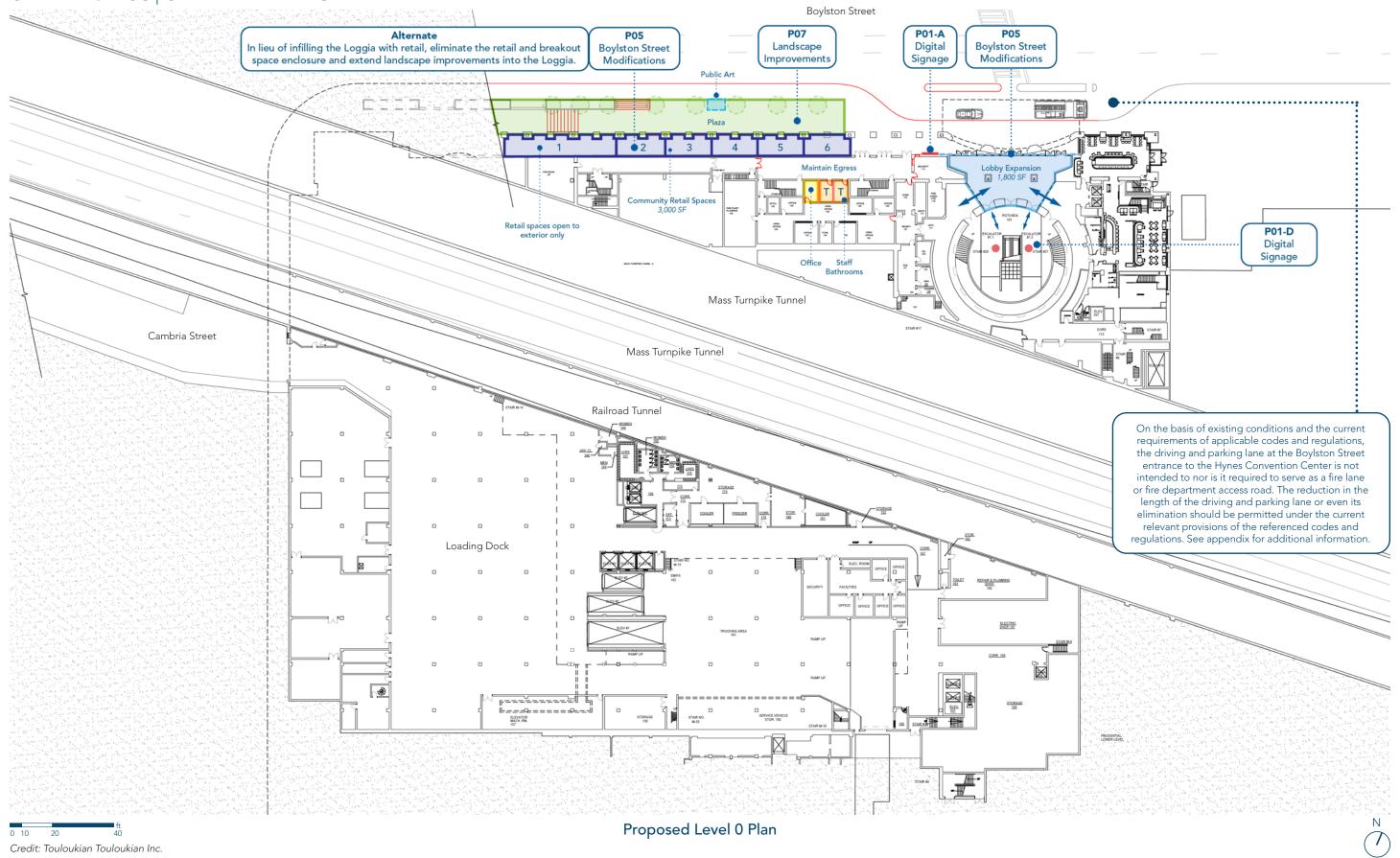


Bower Apartments, Boston  $\mid$  Photo Credit: KMDG

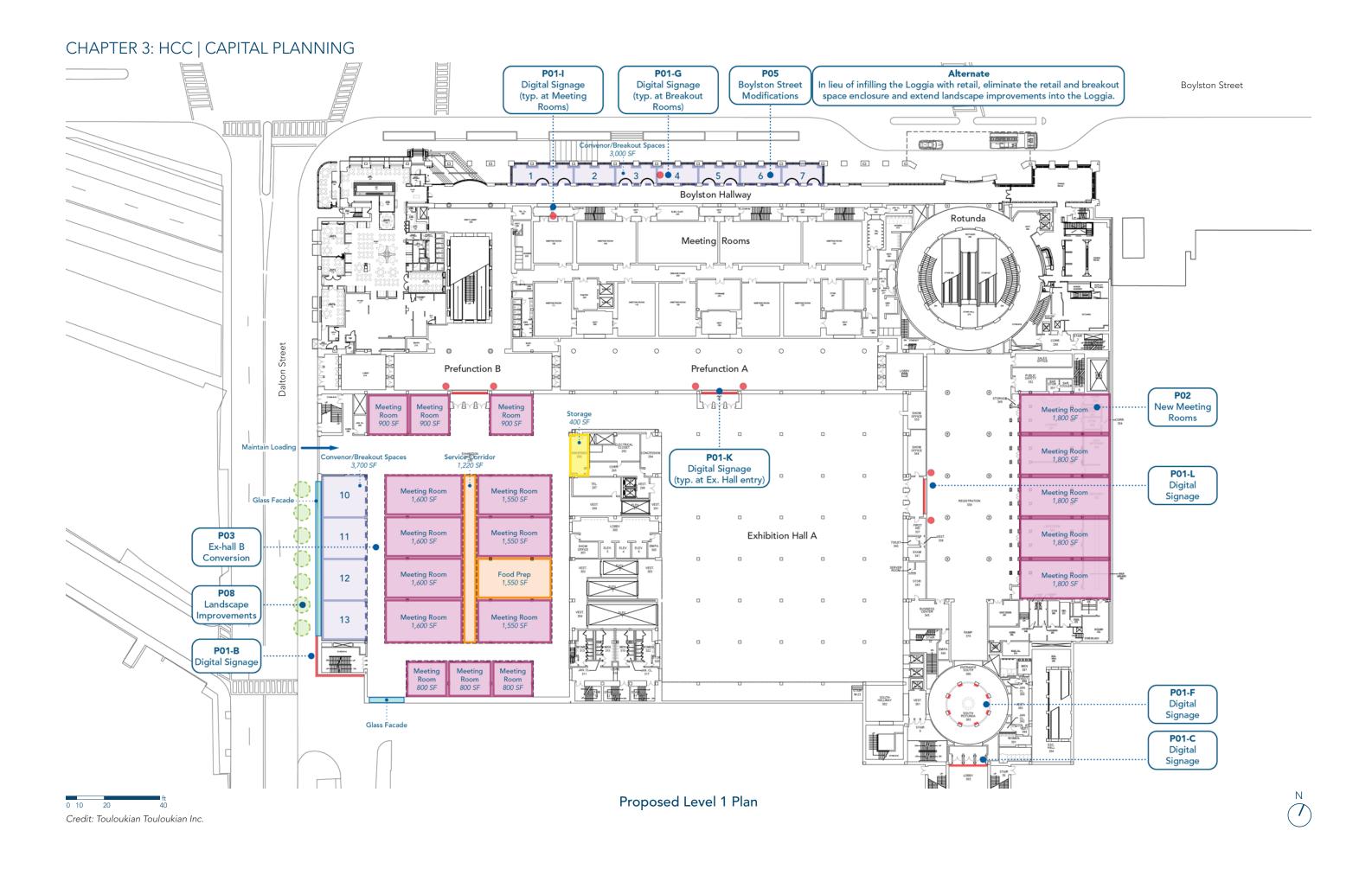
**P08 | Green Wall** A lightweight green wall will be installed along Dalton Street, which will step down in elevation along with the street towards Belvidere Street. The additional vegetation will cool the street corridor, support biodiversity, and mitigate the urban heat island effect along Dalton Street.



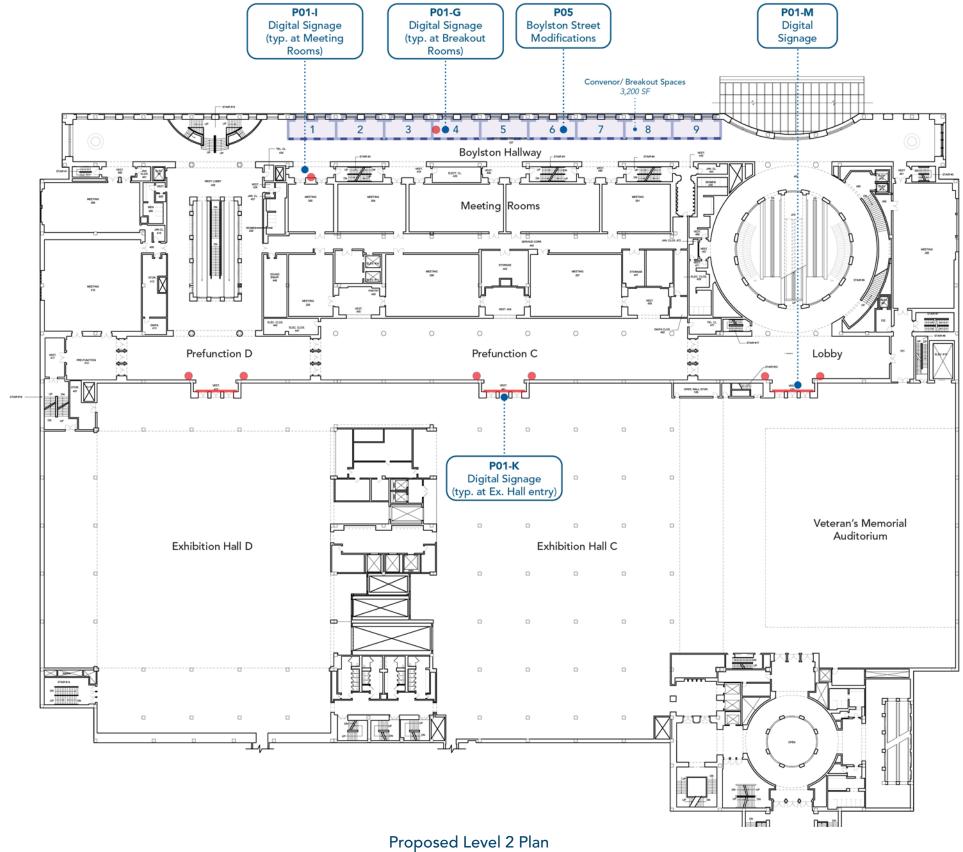
### CHAPTER 3: HCC | CAPITAL PLANNING







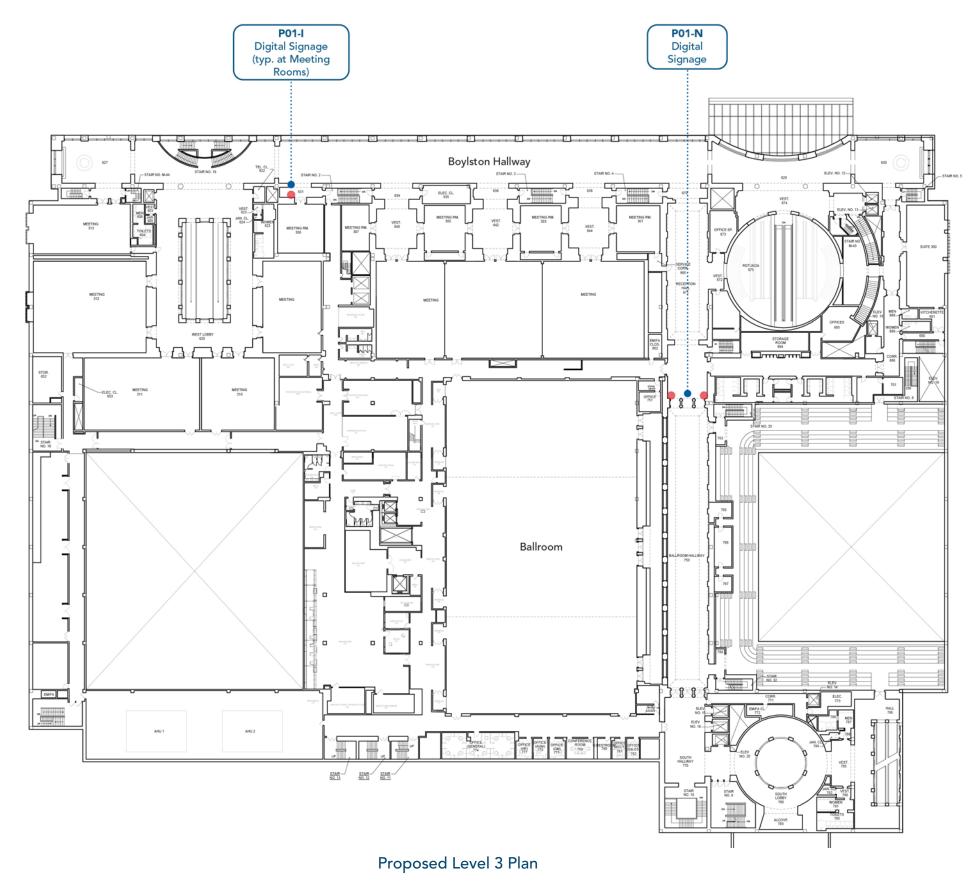








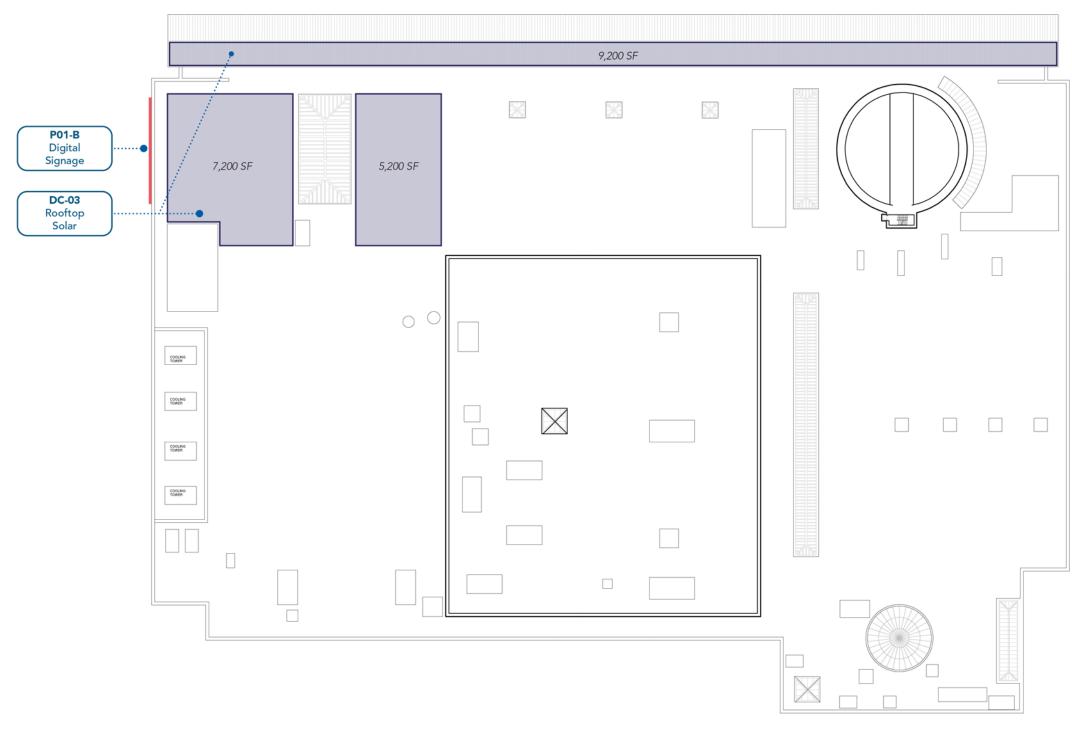






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Proposed Roof Plan



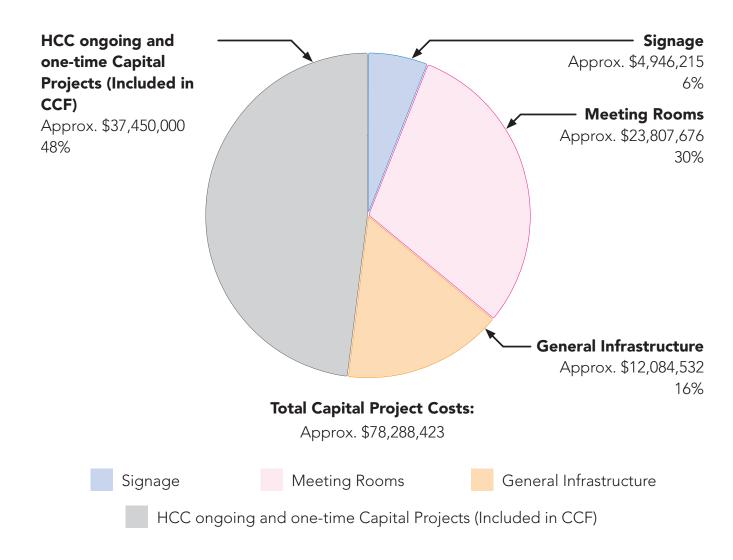




## **Capital Project Costs**

### **Total Project Costs**

- Approx. \$4,946,215 of Signage Recommendations. Escalated to FY 2026 (July 1, 2025).
- Approx. \$23,807,676 of Meeting Room Recommendations. Escalated to FY 2026 (July 1, 2025).
- Approx. **\$12,084,532** of General Infrastructure Recommendations. Escalated to FY 2026 (July 1, 2025).
- Approx. \$37,450,000 of HCC ongoing and one-time Capital Projects (included in CCF).





Veteran's Memorial Auditorium during an event | Photo credit: Signature Boston