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DES ARTS
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**CULTURAL VENUE
RECOVERY PROJECT**

**PROJET DE RÉTABLISSEMENT
DES ESPACES CULTURELS**

Introduction

In late 2020, Arts Network Ottawa entered into a Strategic Cultural Capital Partnership with the Cultural Development and Initiatives Unit at the City of Ottawa to launch the Cultural Venue Recovery Project. The first phase of this project aimed to build community capacity in non-City owned community arts and culture venues by offering access to interior air quality (IAQ) site surveys completed by Bouthillette Parizeau (BPA) engineering firm.

As the World Health Organization has recognized that COVID-19 is an airborne disease¹, it is particularly important for artistic spaces to understand how they can mitigate the risk of transmission for patrons, artists, and staff through changes to their existing HVAC systems. Given Ottawa's climate, the arts and culture sector relies on indoor arts programming throughout the year. As we look ahead to the fall and winter of 2021-22, there will be an increased need to address and understand IAQ to safely re-open artistic venues.

Through our study, we have seen the desire and necessity for the return to in-person experiences of the arts. Yet, there are numerous challenges in determining IAQ strategies that address the nuanced needs of artistic spaces: aerosolized particles are projected during singing and performances, artists need greens rooms with proper IAQ to prepare for their show and audiences often sit or stand in close quarters to view performances or art exhibits. Unfortunately, venues cannot simply increase air flow to their HVAC system, as this often creates additional noise, which impedes the proper reception of a performance. It is therefore important for HVAC systems in cultural venues to account for acoustic requirements. Furthermore, HVAC systems also need to be designed to mitigate fumes produced in pottery, photography, metal working and other visual arts practices.

With the assistance of a jury comprised of diverse artistic community members, Arts Network selected 5 venues for study. The five selected venues - La Nouvelle Scène, The Gladstone Theatre, The Bronson Centre, Live on Elgin, and Studio Space Ottawa – represent a range of different artistic practices, as well as being of differing sizes, capacities, and operating models. Through these 5 site surveys, the engineers created the following general report that features recommendations of improvements that could be made to HVAC systems in cultural spaces to mitigate COVID risks. While the primary audience of this report is venue owners, cultural centres, or event producers, it is important that all artists and patrons of the arts develop literacy of IAQ as our arts and culture sector reopens to advocate for their safety and assess risk.

As a result of this project, we hope to see audiences safely and confidently returning to arts and culture venues. Furthermore, we hope that allowing venues to operate again above break-even

points will in turn facilitate the economic recovery of this sector and curb the closure of these much-needed artistic spaces.

Study Venues

Studio Space:

A visual arts studio that provides stable, affordable working spaces for practicing artists. The studio building was a Sears Warehouse in the 1950's, Runge Press, and most recently a children's indoor amusement park.

The warehouse building has two levels. Most of art spaces are located on the main floor (level 2), as does the server room, water room, dark room, open space for future studios and a lobby. Level one consists of two clay rooms, art office used for plasma cutting and welding, future space for art offices and a main corridor.

Bronson Centre:

A music and performance venue. The building was the originally a high school, constructed in 1928 and expanded several times in 1948, 1952 and 1962 when it was completed with a main foyer and auditorium. It now provides affordable rental space to other non-profit organizations.

The theatre has auditorium seating with a capacity of 978 people, 4 bars, balconies, and a performance stage. The community hall is located at the basement for larger gatherings. Green rooms located on the second floor.

La Nouvelle Scène:

A francophone theatre and gathering place that includes dance, music, film screenings and visual arts. A new complex that opened in late 2016, the building has three floors: basement, ground level (level one) and second floor. The building includes three large gathering venues, hall and various type of rooms such as green rooms, offices, storage, dressing, washrooms, kitchen, control, electrical and mechanical.

Live on Elgin:

A gathering space that can be used by musicians, actors and performers of all kind. The space was renovated by demolishing walls of several rooms to open a large area with seating enough for an audience of approximately 75. The venue includes adjoining bar/foyer and dressing rooms for the performers. The venue is located on the second floor of a two-story building.

Gladstone Theatre:

Independent performance theatre renovated in 2007. The theatre consists of auditorium seating, with a capacity of 230 people in addition to two staff, and a performance stage for the team working the show that consists of 8-10 and occasionally 15+ people. The theater is surrounded with spaces such as the backstage space, entrance, box office, and office rooms.

Key Findings

BPA's engineers based their study on the fresh air requirements of The American Society of

Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standards 62.12, which applies to commercial and institutional buildings. ASHRAE's IAQ standards are part of Ontario Building Code (OBC) requirements; the OBC requires that outdoor air rates supplied by ventilation systems in newly built buildings not be less than the rates required by ASHRAE 62.1.

Although existing buildings are not obliged to comply with standard 62.1 due to grandfather clauses, BPA recommends that owners and tenants review their existing HVAC systems to ensure they provide adequate IAQ for their occupants. As discussed in the following report, IAQ guidelines have evolved substantially since ASHRAE's formation. Though ASHRAE standards have yet to be updated to account for the transmission of COVID particles, meeting the existing benchmark of 62.1 would help minimize transmission risk.

BPA recommended a range of solutions for each venue that was visited.

These suggestions included:

- changing air filters to a minimum of MERV 13 and preferably MERV 14 or better to help mitigate the transmission of infectious aerosols
- using portable air filtration devices to improve IAQ when current HVAC equipment does not meet ASHRAE recommendations for ventilation and filtration, and to remove contaminants such as paint fumes and other toxic chemicals from enclosed spaces
- installing upper-room UVGI (Ultraviolet Germicidal Irradiation) devices. BPA reports that "(...) based on data from other human coronaviruses, a UVGI system designed to protect against the spread of TB should be effective at inactivating SARS-CoV-2 and therefore prevent spread"³
- decreasing the numbers of persons allowed in an enclosed space to meet existing HVAC system capacities.
- installing higher efficiency HVAC systems in older buildings that had yet to be renovated

Arts Network hopes these general guidelines help you safely re-open your artistic space this fall. Should you have any specific questions about IAQ in your venue, Arts Network recommends hiring an engineer to assess your specific situation and needs.

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About Arts Network Ottawa

Since 1987, Arts Network Ottawa has been building a healthy and sustainable arts sector by creating professional development and mentorship opportunities for artists; providing resources to advance the careers of artists and cultural workers; and collaborating through partnerships to advocate the creative, social, and economic benefits the arts play in our community.

