

MUCP x Wavelength

# Reimagining Music Venues | Stage Truck Feasibility Study

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## Executive Summary

The 'Reimagining Music Venues' student team has developed a pioneering mobile music venue concept in consultation with Wavelength Music. The team draws expertise from the Daniels Faculty of Architecture, the Faculty of Information, the School of the Environment, and the Department of Geography & Planning to support Wavelength's ongoing advocacy for the live music sector during the COVID-19 pandemic and beyond. This report fulfills the final deliverable requirements for the School of Cities' Undergraduate Multidisciplinary Urban Capstone Project (MUCP), under the supervision of Dr. Dan Silver (Department of Sociology).

The design process used to investigate and assess solutions was informed by principles of operational excellence, sustainability, and value to stakeholders, and oriented itself about an equitable recovery in the post-pandemic era to support artists, promoters/presenters, venue owners and operators, and audiences across a variety of musical styles and demographics. The state-of-the-art staged vehicle offers an innovative venue model for the music industry in the pandemic recovery period and beyond. Expanding upon existing knowledge and practices around outdoor music presentation, the stage truck offers low-barrier infrastructure to support creative placemaking within an industry heavily impacted by the COVID-19 pandemic.

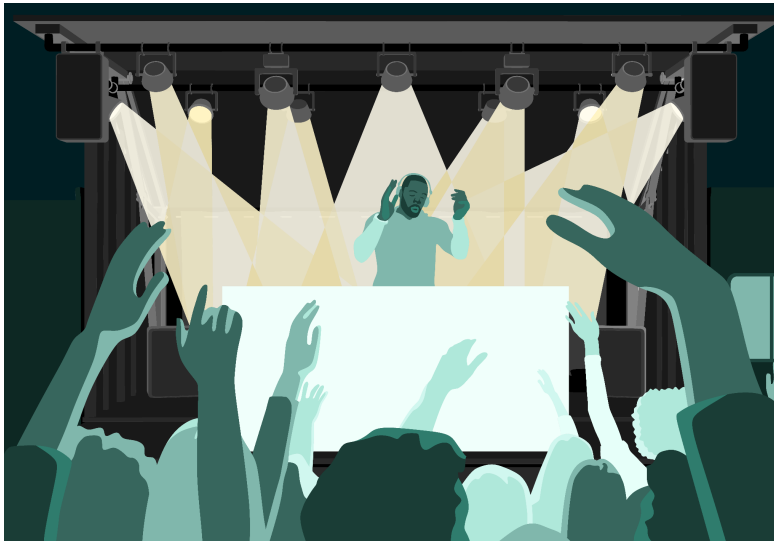
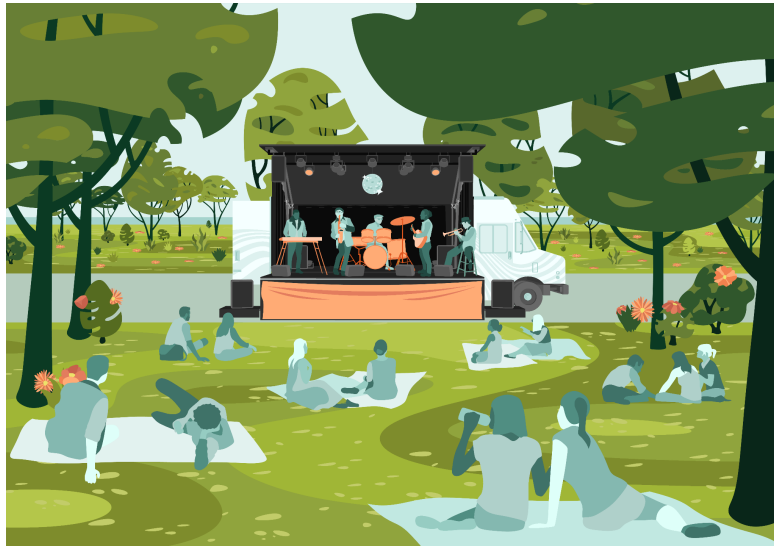
The report explains the antecedents, conditions, and added value of the design solution. The state of the music industry and existing options for outdoor music presentation are reviewed to understand the gaps the stage truck may fill. These findings are mobilized to provide a universal equity framework, administrative toolkit, business case, and design renders that can be used by any future proprietor. Finally, a set of next steps are outlined with a view towards reimagining music venues, and the urban artistic terrain at large.

Although Toronto represents a central node of Ontario's music ecology, traditional and nontraditional live music venues appear in a number of municipalities, including Hamilton, Guelph, Kitchener-Waterloo, and Ottawa. As the project's scope takes a province-wide view, this work is meant to offer inspiration to stakeholders across the province.

*Figure 1: Stage Truck Wrap Graphic*



Figure 2: Stage Truck Renders



## Introduction

### Live Music Venues in the Urban Realm

The role of live music venues in the urban realm can be understood along economic, sociocultural, and geographic dimensions. Live music venues serve as sites of cultural placemaking, economic generation, and community connection. Toronto has been established as a 'Music City' in recognition of the sector's role in the city's cultural and economic growth in the past and present, and as a node within the North American music landscape.<sup>1</sup> The city of Toronto represents a major hub for the Canadian music landscape through the concentration of organizations, institutions, and venues that actively foster its vibrancy.

In economic terms, live music venues generate employment opportunities for venue operators, promoters, presenters, technicians, and artists performing at venues. A study by Nordicity estimated the economic impact of Toronto's live music venues in 2019 at \$852.2M.<sup>2</sup> Within the music ecosystem, live performance spaces function alongside talent agencies, record labels, rehearsal spaces, festivals, and other businesses to weave a rich network that makes up the creative sector. The Nordicity report responds to a demonstrated need to capture the economic value of live music venues in Toronto, and to leverage these findings to support the city's continued growth.

The role venues serve in generating ideas and dialogues is discerned in the context of urban social relations and in cultural production. Hitters & van der Hoeven (2010) identify three distinct dimensions for measuring the social value (social capital, public engagement and identity) and cultural value (musical creativity, cultural vibrancy and talent development) of live music.<sup>3</sup> Venues contribute to the urban social and cultural landscape in material and abstract ways, providing a sense of identity and belonging to the benefit of residents, visitors, and artistic communities. They function as platforms for experimentation and innovation with the power to connect diverse communities, especially those representing equity-deserving groups. Live music venues represent an arena within which to grapple with tensions, triumphs, and tribulations both on venue stages and floors. A CLMA report in 2018 describes the value of music venues in Ontario:

*Live music spaces are incubators, social hubs, and gathering places for all kinds of artists and people. They are small businesses, community organizations and, in many cases especially where festivals are concerned, they are cornerstone, decades-old institutions with legacies that continue to impact upon generations of Ontarians. Live*

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<sup>1</sup> <https://www.toronto.ca/wp-content/uploads/2017/08/961d-backgroundfile-90615.pdf>

<sup>2</sup> Nordicity, 2020, p. 5-6

<sup>3</sup> <https://doi.org/10.1016/j.cities.2019.02.015>

*music spaces are just as important to our neighbourhoods and cities as libraries and other cultural institutions.*<sup>4</sup>

For artists, venues operate at the intersection of economic and cultural value by offering a space for exposure and talent development. Furthermore, venues present an arena for networking between professionals in the music industry and related sectors. To audiences, they offer a space for socializing and shared enjoyment of a creative performance. The importance of venues and their multifaceted contributions to urban society have been unequivocally conveyed by scholarly and industry researchers, spurring a range of efforts to develop a keen understanding of their value, and how it can best be maintained.

### The Music Landscape in Toronto during COVID-19

‘Reimagining Music Venues’ seeks to address both short and long-term challenges faced by the live music ecology in Ontario, many of which have been exacerbated by the COVID-19 pandemic. Despite the sector’s wide-spanning contributions to the urban realm, live music venues have faced a number of issues that pose serious challenges to their vitality.

Gentrification and rising property values for housing, as well as recording, rehearsal, and performance spaces, have forced artists out of urban cores, including Toronto’s, and apply undue pressure on venue operators’ business models.<sup>5</sup>

The closure of numerous small and medium-sized music venues in the past decade has been cause for alarm within the local music community.<sup>6</sup> This has been exacerbated by the COVID-19 pandemic — NOW Toronto identified 22 music venues that closed in 2020, and several more have seen challenges staying in operation as a result of prolonged closures.<sup>7</sup> Furthermore, rising insurance premiums or an inability to acquire them outright has worsened in recent years.<sup>8 9</sup>

A range of policy measures have been introduced at the federal, provincial, and municipal levels to support live music venues, including wage and rent support payments, emergency grant funding, and zoning and noise bylaw amendments. However, for venue operators, wage and rent supports represent only a partial solution in the third year of an unpredictable public health scenario. Though certain bylaws have been amended to accommodate new types of music performances, adherence to regulations and noise complaints remain an ongoing issue, especially with the popularity of events taking place outdoors. For presenters, constantly evolving public health measures, including capacity limits, significantly complicate the planning

<sup>4</sup> CLMA Vision for Ontario’s Live Music Industry 2018, p. 16

<sup>5</sup> <https://www.toronto.ca/wp-content/uploads/2020/10/9846-Re-Venues-FINAL-REPORT.pdf>

<sup>6</sup> <http://spacing.ca/toronto/2019/05/21/vanishing-venues-new-funding-models-favour-festivals-over-small-music-clubs/>

<sup>7</sup> [nowtoronto.com/music/toronto-live-music-venues-that-closed-in-2020](http://nowtoronto.com/music/toronto-live-music-venues-that-closed-in-2020)

<sup>8</sup> [www.cbc.ca/news/canada/toronto/live-music-venues-struggle-to-stay-a-float-amid-skyrocketing-insurance-rates-as-pandemic-recedes-1.6084877](http://www.cbc.ca/news/canada/toronto/live-music-venues-struggle-to-stay-a-float-amid-skyrocketing-insurance-rates-as-pandemic-recedes-1.6084877)

<sup>9</sup> [www.theglobeandmail.com/arts/music/article-music-venues-facing-sky-high-insurance-rates-if-they-can-get-a-policy/](http://www.theglobeandmail.com/arts/music/article-music-venues-facing-sky-high-insurance-rates-if-they-can-get-a-policy/)

process, and impact their ability to ensure break-even on live music events. In the event of cancellations and rescheduling, organizers must negotiate the need to guarantee revenue while managing audience expectations, including providing refunds as required.

Though venues are lauded for their contributions and value, to equity-deserving groups, they may represent an iteration of systemic inequalities or outright riskscapes. As demonstrated by a range of past and ongoing research, the lack of BIPOC artist and venue operator representation in music venues have made them sites of exclusion and inequality. The CLMA's newly published 'Closing the Gap' study responds to a demonstrated need to better understand the deep-seated and widespread challenges and barriers that affect BIPOC artists and live music workers, and to confront racism in the creative sector broadly.<sup>10</sup> A number of music collectives, venues, and festivals in Ontario have introduced safety and inclusion initiatives in recognition of the issues around sexual misconduct, harassment, and discrimination in music spaces.<sup>11</sup> <sup>12</sup> It is important to actively seek and consider the perspectives and experiences of marginalized and equity-deserving populations in developing resilient music spaces.

With the precarious status of live music performances since March 2020, a concerted effort by a range of stakeholders has been undertaken to ensure the ongoing vitality of music venues, and to utilise the post-pandemic recovery period to set new precedents. For 'Reimagining Music Venues', the Client seeks to explore innovations that can be employed by a range of Do-It-Yourself (DIY), grassroots, and non-profit music workers. The stage truck offers one placemaking tool amongst an array of economic, legislative, and creative strategies to ease the transition back to live music events. As it is intended for long-term and variable uses, the stage truck presents a high-impact piece of infrastructure that will retain its relevance as the music sector continues to evolve, not least without the work concurrently undertaken to address interwoven issues in the music sector.

#### DIY/Grassroots/Non-Profit Music Presentation

'Reimagining Music Venues' focuses on the DIY, grassroots, and non-profit music landscape. DIY music organizations vary in structure and scope, but are characterized by an ethos of self-sufficiency and community-building through grassroots initiatives.<sup>13</sup> This landscape spans the entire city of Toronto, and encompasses a broad range of musical genres and demographic communities. It is especially suited to working with artists and audiences representing equity-deserving groups.

Live music presentation at the DIY and grassroots scale inspires more flexible and innovative programming and operating models. Events held in alternative or nontraditional spaces demonstrate important opportunities, such as decreased reliance on bar sales, and greater

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<sup>10</sup> [CLMA Closing the Gap Full Report](#)

<sup>11</sup> <https://nowtoronto.com/music/features/safety-music-scene>

<sup>12</sup> <https://www.cbc.ca/news/canada/british-columbia/music-festivals-react-to-push-for-improved-safety-measures-for-women-1.4224254>

<sup>13</sup> <https://www.toronto.ca/legdocs/mmis/2019/ec/bgrd/backgroundfile-134956.pdf>



experimentation, such as through cross-disciplinary performances.<sup>14</sup> These events may occur in commercial use spaces (storefronts, breweries, galleries), industrial use spaces (warehouses, construction sites), open spaces (parks), and residential spaces (private homes), thereby expanding the definition of live music spaces well beyond traditional bricks-and-mortar venues in specially zoned districts. However, without consistent infrastructure and limitations on funding eligibility, DIY organizations are particularly vulnerable to the challenges experienced by the entire music sector. Developing solutions that preserve a DIY ethos while preventing the risks associated with bold artistic choices is vital to achieving goals of social justice, equity, and diversity in the music landscape.

## Design Process

The road to the stage truck has been a circuitous one. As the range of issues affecting live music venues is broad, the project scope saw significant adjustments to effectively meet its objectives within the context of the MUCP. An iterative process rooted in research and consultation helped to distill one concrete, impactful deliverable that addresses the Client's problem statement and embodies its values. The scoping stage was also vital in developing realistic solutions in consideration of the project team's capacity, skill sets, and available resources.

Given the size and diversity of the music sector, the project is concerned with small (under 300 person capacity) venues that primarily support new and emerging artists in Toronto and other Ontario cities on both public and private property. Originally, the Client was interested in studying an assortment of venue models with a traditional research component (stakeholder interviews and questionnaire) to fill gaps in industry knowledge. However, the MUCP's design-oriented approach and requirement of a single deliverable gave way to the stage truck concept.

Initial consultations with the Client established a few key values to drive the project. These include:

- Operational excellence/sustainability (from business and environmental standpoints);
- Equity (proposed solution should help to advance EDI (Equity, Diversity and Inclusion) goals for the music sector);
- DIY/non-profit friendly (keeping intended beneficiaries in mind); and
- Long-term change (rethinking the landscape, rather than applying band-aid solutions).

A theme around 'adaptations in music venues in response to COVID-19' was determined to establish a lens of futurity and potential for timely, positive change. With this theme, the team explored innovations related to music venues during the pandemic for both permanent and temporary event spaces. A literature review consisting of scholarly research, the music trade press, and a landscape study yielded a range of solutions in terms of cost, size, and problem

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<sup>14</sup> CLMA Vision for Ontario's Live Music Industry 2018, p. 6

targeted. To narrow the results of the discovery period, design solutions were organized according to their physical and approximate financial scope (micro/meso/macro) to yield three possible design options.

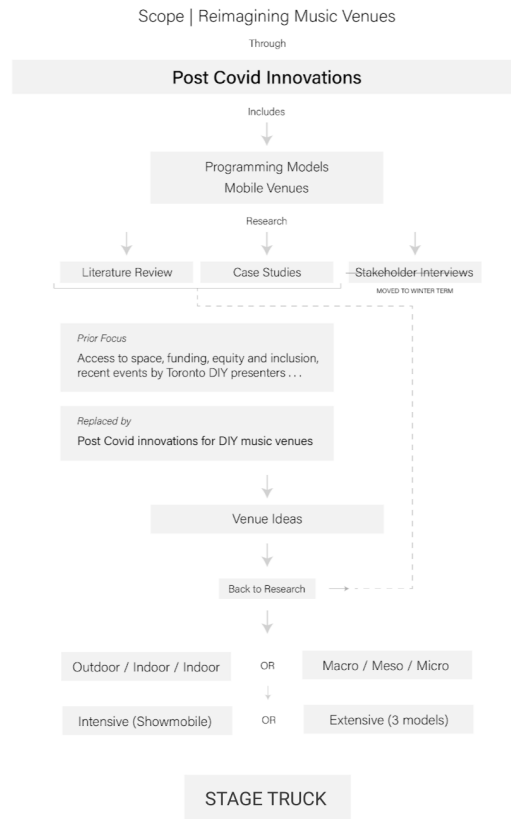
The findings of the design research shored up a range of potential ideas. As the Statement of Need suggested 2-3 designs as final deliverables, the group developed two sets of categories by which designs could be viewed:

- Outdoor/indoor with stage/indoor without stage; or
- Macro/meso/micro-scale (according to size/budget).

One of the concepts gleaned from the design research phase—a vehicle with built-in staging—emerged as a particularly compelling idea. In dialogue with the Client, the need for extensive work around its design, including technical requirements and financial and operating models, became clear.

The team and Client then considered an ‘intensive vs extensive’ approach, whereby the former would channel all efforts towards a robust ‘stage truck’ case study, or three more generic designs that could be developed by stakeholders on their own. Ultimately, an intensive route was selected, and all subsequent research, design, and engagement stages centered on the stage vehicle. This process is visualized in Figure 3 (below).

Figure 3: Design Selection Process



To support due diligence in the design selection process, a Pugh Matrix (Figure 4) was used to assess each concept’s alignment with the overall project goals according to the Client’s stated values. The stage truck performed well in this assessment, which prioritized longitudinal, generative qualities and real benefit to intended stakeholders as the primary objectives.

The final three design options also included UVC lights, which stood out as a novel possibility in music venues to mitigate health and safety issues in the (post) pandemic era, but scored poorly due to its ephemerality, for it would become obsolete once COVID-19 posed a minimal risk in venues. Another, broader design option focused on the concept of developing a range of ‘cover ups,’ intended to adapt existing spaces through modifying their decor. However, its lack of innovation and tenuous impact did not warrant a dedicated design process.

A detailed breakdown of the design assessment (Figure 4) and explanation of the criteria (Figure 5) can be found below.

Figure 4: Design Matrix

**Scale**

The grade distribution scale of 0 - 5 assigns quantifiable values to proposed solutions, where a rating of 0 signifies a solution of no importance or effectiveness, and a rating of 5 signifies most importance and effectiveness in responding to the Client’s needs.

**Design Matrix | Grade Distribution**

Grade Distribution Scale: 0 - 5

Weight	Assessment Criteria	Stage Truck	UVC lights	Cover Ups
5	Operational Excellence	4	1	3
4	DIY Friendly	4	2	4
4	Capacity	3	3	4
4	Long-term Impact	4	2	3
3	Accessibility	5	0	0
3	Environmental Sustainability	2.5	2	3
2	Innovation	4	4	1

**Design Matrix | Grade Calculation**

Matrix Calculation: weight x grade = category evaluation

Weight	Assessment Criteria	Stage Truck	UVC lights	Cover Ups
5	Operational Excellence	20	5	15
4	DIY Friendly	16	8	16
4	Capacity	12	12	16
4	Long-term Impact	16	8	12
3	Accessibility	15	0	0
3	Environmental Sustainability	7.5	6	9
2	Innovation	8	8	2
<b>Final Assessment</b>		<b>94.5</b>	<b>47</b>	<b>70</b>

Figure 5: Design Matrix Explanation

Criteria	Weight	Explanation
Operational Excellence	5	The financial and operational dimensions of the solution are top of mind for the Client, as its feasibility rests upon potential industry sponsors, municipal grants, or public-private partnerships. This category considers profitability using the simple formula of <i>profit = revenue - costs</i> to assess the financial drains and potentials of each proposed solution. Weighing costs, revenues, and feasibility allows for a fruitful assessment of economic sustainability, which the Client stressed to be of utmost importance. As such, the highest weight is assigned to this criterion for each design to center the process towards pragmatic pathways.
DIY/Non-profit Friendly	4	A core element of the Client's Statement of Need emphasized the exciting versatility of DIY venues. Upon further discussions with the Client, a DIY-centric solution was realized, and assigned significant importance in our design matrix, with a weight of 4. This criterion privileges solutions with the ability to create music venues in a wide variety of locations, answering the Client's call for an adaptable venue.
Capacity	4	Capacity assesses the non-financial feasibility of our proposed solutions. Our definition of capacity climbs the ladder of abstraction from the number of concert-goers able to experience our design, to the restrictions imposed by Ontario's music venue policy. Therefore, capacity comprises physical (such as storage and transportation) and personnel limitations (such as administration requirements), alongside bylaws and regulations within Ontario. As these factors are essential when assessing the real-world suitability of each design, capacity earns a weight of 4 in the design matrix.
Long-term Impact	4	This criterion was formulated to assess the long-term impact of each solution with regard to COVID-19, and the need for pandemic-proofing music venues in the future. During a slow transition out of the COVID-19 pandemic, venue elements such as ventilation and increased hygienic measures were explored in depth. While the need for pandemic-proofing holds temporal limits, 'long-term impact' is weighted heavily to prioritize health and safety at all times.
Accessibility	3	An assessment of accessibility evaluated the physical accessibility of each design to consider climate conditions and patron or performer needs. While this criterion featured heavily in our initial Client discussions, it took a back seat when we veered away from programming designs, and into physical venues. Hence, accessibility is weighted by a factor of 3.
Environmental Sustainability	3	The Client and project team considered the opportunity to embed environmental consciousness into the designs. We explored the basic emissions and footprint produced by the materials used in each solution. In the case of the stage truck, transportation implications and fuel usage were examined.  However, when cast against a background of financial and capacity

		constraints, environmental sustainability lurked in the background of early consultations. At a factor of three, this ranking posits environmental sustainability as an important factor within our final solution, but secondary to the most critical criteria.
Innovation	2	The Client expressed a desire to revitalize Ontario's music venues through innovative solutions. This criterion also captures an overarching goal around ' <i>Reimagining Music Venues</i> ,' and represents an exciting design opportunity for the live music industry. However, when compared to the rest of our criteria, innovation becomes a "nice-to-have," rather than a "need-to-have," and is thus weighted at a factor of 2.

As evidenced by the discovery period, the idea of a staged venue for live performance is not a new one, but the stage truck in this iteration adopts the built form as a permanent, cost-friendly, and low-barrier venue solution for the music community to offer a competitive advantage in the live music scene. With ongoing public health measures, the stage truck offers a flexible option to present outdoors, and a novel concept to attract audiences, yet offers long-term potential in expanding the geographies of live music, and advancing the future of sustainable, equitable venues (see 'Existing Services/Builds').

### Stakeholder Engagement

A stakeholder engagement process was introduced to the project to ensure the eventual design concept's relevance and meaning to its intended beneficiaries. Initial plans for the stakeholder engagement sought to collect data on industry needs to inform preliminary research, but was revised to support latter stages of the design process. Once the stage truck concept was finalized, the stakeholder engagement presented an opportunity to receive feedback on a concrete design and a proof of concept.

A design review panel was convened in an online format in January 2022, with attendees representing promoters and presenters, venue operators, musicians, and the City of Toronto. Participants were identified according to their involvement and knowledge of the DIY music community in Toronto, as well as prior participation in a focus group at the School of Cities. The session sought to gain insights into the stage truck's role as a cultural placemaking tool, how it may be useful to stakeholders, potential challenges, and built design elements. Without a confirmed entity operating the stage truck, the session was intended to understand the longitudinal and more qualitative value the stage truck may hold. The session did not focus on granular financial and policy matters while the stage truck remains a proof of concept. At the time of the session, there was an interest in pitching the stage truck as a City-operated entity, but the project team sought to keep various avenues in mind, and avoid over-promising to stakeholders before receiving confirmation of proprietorship.

The lively discussion with stakeholders yielded important feedback in refining the physical and operating model of the stage truck. The project team learned of the importance of the stage

truck to be an innovation, rather than iteration, of existing venue models in Toronto. The need to ensure thoughtful, effective policy for the stage truck to achieve its stated goals of reaching new terrains and users was made clear in the session. From a presenter's perspective, the vehicle's built form and any administrative processes must represent genuine levity and logic for it to be worth pursuing as a venue space. The concept produced excitement amongst participants, but underscored the critical issues the stage truck must avoid to make it an advantageous and accessible venue option at its operational stage.

For a detailed description of the stakeholder engagement findings, refer to 'Appendix A. Design Panel Review: Engagement Summary'.

Figure 6: Stage Truck | Axonometric

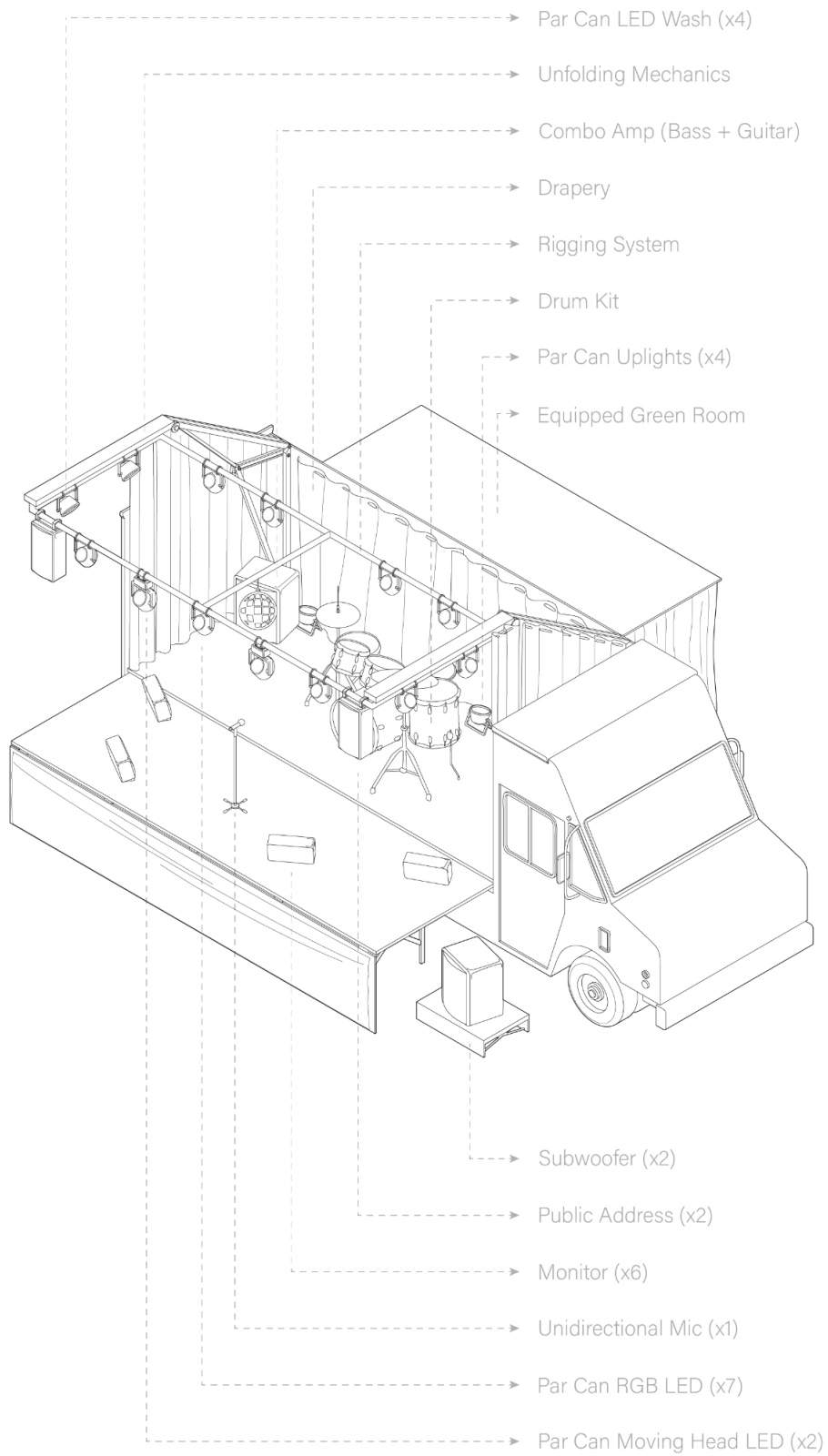
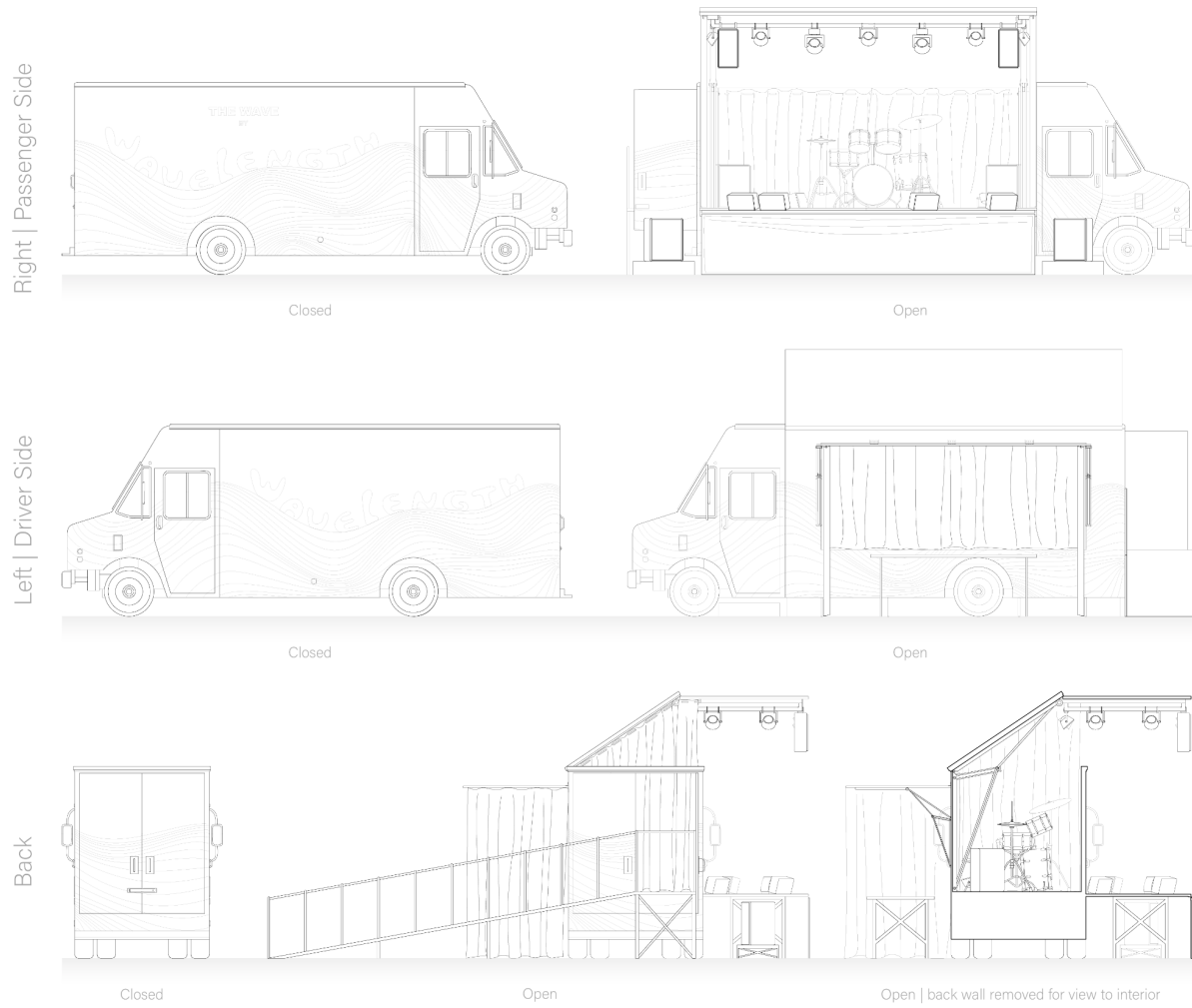




Figure 7: Stage Truck | Elevations + Section



## The Case for a Mobile Music Venue

The stage truck offers a range of tangible and intangible contributions to the live music ecosystem. As a piece of built infrastructure, it represents a novel venue model specifically designed for DIY and non-profit music presentation. Its cost affordability and flexible basic operating scheme renders it an agile and adaptable tool for a range of users. The stage truck is intended as an opportunity to expand the live music landscape by shifting expectations of where a concert may take place. This aligns with public initiatives to move art outside of the downtown core, and to develop cultural infrastructures throughout all parts of the city.<sup>15 16</sup> As a mobile unit specifically geared towards the music sector, its novelty in Canada's 'Music City' marks a new chapter in ensuring that both the most iconic and harder-to-reach areas all fall under this banner. In moving towards more frequent, accessible, and vibrant music performances, the stage truck emblemizes a step towards longitudinal change.

It is important to note that these value-adds are not inherent to the stage truck's physical design, but will accompany it through effective financial, policy, and programming decisions. The following sections outline key aspects that require the venue operator's attention, but will require consolidation by the specific entity that adopts the vehicle's operation, as specific mandates and approaches vary across organizations.

### Long-Term Contributions to the Live Music Ecosystem

The stage truck's novelty in Toronto represents an exciting local initiative, but given the significant investments it requires, an assessment of its long-term benefits reveals reverberative impacts for both audiences and presenters, even as its novelty diminishes over time. As the stage truck is meant to overcome psychogeographic boundaries with regards to spaces deemed viable for creative use, it can help to normalize new mobilities in relation to live music events. The stage truck may help to encourage travel from the downtown core to areas such as Scarborough or East York, in the same way that it is seen as commonplace for audiences to travel downtown for an event. For users of the stage truck, its agility and below-market cost presents an opportunity to consider previously unexplored or unviable sites with reduced risk from an operational standpoint.

In embodying values of self-sufficiency and community building through its physical and conceptual design, the stage truck is emblematic of an alternative music venue which helps to uplift the grassroots music scene in the city. As a mobile and low-cost venue with non-traditional staging, the truck reflects the ethos and values of grassroots and non-profit presenters and performers across the city. To embrace Toronto's cultural vitality is to uplift its DIY and grassroots music culture, and the stage truck consequently acts as an innovative and

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<sup>15</sup> <https://www.toronto.ca/wp-content/uploads/2019/12/92e1-Toronto-Public-Art-Strategy-2020-2030.pdf>

<sup>16</sup> <https://torontolasos.com/about/>

important addition to Toronto's music landscape at large. In the context of the city's music sector, the stage truck's presence throughout, including in high-visibility areas, underscores the importance of grassroots music as a driving force for Toronto's creative development at large. Clear strides to support it, therefore, help to expand collective visions of live music presentation in the city.

For clients, particularly those representing DIY and non-profit organizations, the stage truck's below-market rates support more impactful uses of grant funding and other existing revenue streams. Rather than spending significant portions of a budget to rent portable stages, presenters and collectives can allocate funds towards building up their organization, and improving the conditions of the music industry at large. This may include offering or increasing the value of staff and artist compensation, expanding the scope of activities, such as implementing pilot or incubator programs, improving accessibility at events and ensuring AODA compliance, and conducting strategic initiatives including EDI frameworks and programming models. Thus, the stage truck can be understood by its users and by grant-funding institutions as a production enhancement tool, allowing stakeholders to focus on long-term growth and development.

#### Existing Services/Builds

The stage truck draws inspiration from and expands upon several existing models for staged vehicles. A landscape study of historical and current examples according to their physical and operating models helps to maximize the stage truck's utility in the context of Toronto's non-profit music landscape. Their designs range in size and capacity, intended uses, cost, logistical elements, and programming mandates, and thus offer important lessons in the development of a genuinely accessible and effective solution for Toronto in the current moment.

The concept of a stage that folds out from or is built into a vehicle can be briefly typified according to their basic shapes and functionalities. Stageline, a leading designer and manufacturer of mobile venues in North America, produces an SL-series of hydraulic stages at a range of sizes that unfold from a transport trailer, and are transported by a truck tractor to accommodate outdoor music events.<sup>17</sup> These stages are durable and reputable, but frequently fall out of the budget range for grassroots presenters, especially as they do not include audio equipment. Furthermore, the SL-series' thrust-style stages do not keenly lend themselves towards music presentation with a more intimate or otherwise alternative programming vision. The transport trailers themselves also require parking space and a towing vehicle, representing a limitation for concert producers seeking an agile venue option.

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<sup>17</sup> <https://stageline.com/all-products/#2>

Wenger, a US-based staging equipment manufacturer, markets a Showmobile©. Much like the SL-series, it unfolds from a trailer into a bandshell, and is enhanced by a stage deck.<sup>18</sup> Its distinctive ‘shell and canopy’ shape is conducive to visually transforming into a unique performance space, but is not widely marketed by staging companies in Canada. Similar to the SL-series stages, the Showmobile requires towing by a separate vehicle.

The scan of existing models suggests that only one manufacturer builds a stage that is built into the truck rather than an isolated trailer. Experimental Vehicles, a US-based manufacturer, offers a custom-fit crew van called the EZ Stage Truck, with an estimated 10-minute setup time for use at events.<sup>19</sup> As of April 2022, its retail price is listed at a starting point of \$139,000 USD, which includes power, storage space, and a television screen, but not audio or specialist lighting equipment. One of many vehicles in Experimental Vehicles’ fleet, the EZ Stage Truck does not include much of the equipment necessary for live music presentation, and is consequently not offered by any third parties for rental uses, despite its similarity in stage size to trailer-type counterparts and high maneuverability.

The mobile staging market in Canada is predominantly occupied by trailer-type portable stages, rented for individual events through the manufacturer or a third party that leases, sets up, and maintains the property. Portable venues are also offered outside of the private rental market, notably by municipalities for community-based events.

The use of a fully-fitted standalone vehicle (where the stage is not towed separately) for music presentation has made a prior appearance in Toronto. A temporary pilot project by Red Bull brought a retrofitted tour bus throughout North America as a mobile stage.<sup>20</sup> However, it was not marketed as a resource to arts workers outside of Red Bull’s program, and does not appear to have been intended as a permanent fixture in any given locale.

In the public sector, portable stages are offered as a resource to event producers in a number of municipalities across North America. These may take the form of the Wenger-style Showmobile or another, equivalent trailer-attached format to produce a thrust stage. A survey of municipal-run event management programs throughout North America indicates the current availability of ‘Showmobiles’ in locales ranging from major artistic hubs to small communities (Figure 8).

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<sup>18</sup> <https://shop.wengercorp.com/education/showmobiler-mobile-stage-and-canopy.html>

<sup>19</sup> <https://experientialvehicles.com/vehicles/ez-stage-truck/>

<sup>20</sup> <https://www.redbull.com/ca-en/events/redbull-tourbus-canada>

Figure 8: 'Showmobile' Services by Local Governments (North America)

Ontario	Canada	United States (non-exhaustive)
City of Welland <sup>21</sup>	Hinton, AB <sup>22</sup>	Suffolk County, NY <sup>23</sup>
City of Windsor <sup>24</sup>	Saskatoon, SK <sup>25</sup>	City of Winston-Salem, NC <sup>26</sup>
City of London <sup>27</sup>		City of Fairfax, VA <sup>28</sup>
		City of Northfield, MN <sup>29</sup>
		Allegheny County, PA <sup>30</sup>
		Nashville, TN <sup>31</sup>

The former operation of a municipally-owned portable stage in Toronto represents a relevant case study in maximizing its utility. The City of Toronto's Parks, Forestry & Recreation division previously offered two Showmobiles<sup>32</sup> with hydraulic stages that could be towed in by a pickup truck. The Showmobiles were equipped with basic lighting and sound facilities, as well as a generator. The City of Toronto's Showmobile was considerably larger in size than typical models, and could accommodate larger ensembles, including orchestras and choruses, thereby catering towards a different musical demographic than those aimed at performances by a four or five-piece band. Furthermore, its limited audio and lighting functionality rendered it only suitable to musical styles that minimally rely on amplified sound, such as choirs or symphonic groups, and thus neglected the diverse range of genres represented in Toronto. Its unclear and/or outsized cost and bureaucratic stipulations, especially when compared to private sector options, may have been a sticking point for both active and potential users. Though its cost was higher than what was similarly available, subsidy opportunities may have made it a viable option for community groups. For those outside of these fee waivers, however, the Showmobile presented a limited utility. The City of Toronto's Showmobile service was discontinued in 2017 after it fell into a state of disrepair; though the cause of its demise is

<sup>21</sup><https://www.welland.ca/facilities/showmobile.asp#:~:text=To%20request%20the%20use%20of,and%20payment%20is%20due%20immediately.>

<sup>22</sup> <https://www.hinton.ca/220/Wenger-Showmobile>

<sup>23</sup><https://www.suffolkcountyny.gov/Departments/Parks/Doing-Business/Applications-Permits-and-Forms/Showmobile-Rentals>

<sup>24</sup> <https://www.citywindsor.ca/residents/Recreation/Special-Events/Pages/Staging-and-Equipment-Rentals.aspx>

<sup>25</sup> <https://www.saskatoon.ca/parks-recreation-attractions/events-attractions/event-planning/services-fees>

<sup>26</sup> <https://www.cityofws.org/3052/Showmobile-StageLine>

<sup>27</sup> <https://london.ca/special-event-support>

<sup>28</sup> <https://www.fairfaxva.gov/government/parks-recreation/rental-venues/showmobile>

<sup>29</sup> <https://ci.northfield.mn.us/348/Showmobile>

<sup>30</sup> <https://www.alleghenycounty.us/parks/resources/rent-the-showmobile.aspx>

<sup>31</sup> <https://www.nashville.gov/departments/parks/permits-rentals-and-reservations/showmobile>

<sup>32</sup><https://www.toronto.ca/311/knowledgebase/kb/docs/articles/parks.-forestry-and-recreation/community-recreation/rentals-recreational-equipment,-showmobile-at-city-facilities.html#:~:text=The%20City%20of%20Toronto%20has.in%20the%20Etobicoke%20York%20District.> [archived webpage]

undetermined, its specifications and brief testimonials from past users suggests that it did not serve a significant role in the live music sector. Furthermore, a growing trend of discontinuing public sector Showmobiles is emerging, as local municipalities cannot afford to update the stages. Thus, private sector companies can demand a higher rental charge for their up-to-date portable stages, rendering this optional less affordable.

Active and defunct programs speak to the potential value and uptake of mobile stages by artistic communities, and shed light on aspects that require iteration. These physical and administrative schemes offer inspiration and learning opportunities to develop a vehicle that keenly speaks to presenters' and performers' needs. An assessment of the portable stage market establishes several important considerations. First, to realize its purpose, the stage truck must represent a consistent and transparent resource to local users; the temporary nature of the Red Bull truck, and the lack of detailed information on costs, specifications, and policies on municipal websites pose barriers to access. A successful stage truck will proactively communicate its availability and all relevant details to target users. Many of the Showmobiles are marketed towards community organizers in general, and contain only rudimentary sound equipment, such as one wired microphone and a basic PA system. For music events, publicly-owned mobile stages lack the technical sophistication and level of visual customizability that has been expressed as a key requirement by stakeholders; when the cost of these stages do not offer a competitive advantage, municipally-owned stage vehicles are not an especially appealing option. The City of Toronto's Showmobile, which experienced issues around its operational longevity, underscores the importance of modularity in the vehicle's build. The ability to maintain, repair, or swap out individual pieces of equipment is crucial to managing wear-and-tear, as well as adapting to technological innovations in live music gear. Thus, the stage truck represents an opportunity to shift the model from expensive and/or ephemeral projects into a permanent, yet durable design, where its features, costs, and primary uses are made clear to prospective users, thereby maximizing the benefits of a vehicle-based staging format to presenters, promoters, and performers.

## Policy Considerations

The stage truck is accompanied by a set of policy considerations in response to legal requirements that pertain to portable stages, outdoor special events, and music-related questions more broadly. This section outlines key responsibilities that may be borne by the stage truck's operator or its users in an effort to proactively mitigate challenges that may arise in relation to the vehicle navigating the urban terrain. Due to the temporal and organizational contingency of the policy process, it does not build out a concrete framework, but rather points to areas of inquiry for future operators, and provides insight wherever possible.

### COVID-19

Given the theme from which its design was conceived, the stage truck represents a response to the short and long-term impacts of the COVID-19 pandemic on the live music sector in Canada. It is important to note that the music community has seen constantly evolving policies and guidelines around COVID-19, including during the stage truck's development. The research and design phases were foregrounded by a brief lockdown which largely forced music events' cancellation, as well as a shift in isolation periods from two weeks to five days, distancing protocols in work and event spaces largely removed, and capacity limits in constant flux.<sup>33 34 35</sup>

As pandemic-related protocols and guidelines continue to evolve in Ontario, the stage truck and its users will respond to the most up-to-date, relevant policies, guidelines and bylaws. Consequently, this report will not interpret specific policies and mandates related to COVID-19 (e.g. mask mandates, vaccine requirements, isolation timelines, testing and travel requirements) while they are subject to change at the municipal, provincial or federal levels.

### Noise

The responsibility of abiding by all applicable noise regulations and mitigating excessive noise will be borne by the user or organizer of the event at which the stage truck is used. Noise bylaws are implemented by municipalities in an attempt to balance the interests of the local community and music venues, presenters and promoters, and artists. In the event of failure to comply with relevant bylaws or to obtain the necessary permits for their event, the user will solely be responsible to pay for any and all fines and fees.

Section 1 of Toronto's Municipal Code Chapter 591 defines "amplified sound" as sound made by any electronic device or a group of connected electronic devices incorporating one or more loudspeakers or other electro-mechanical transducers, and intended for the production,

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<sup>33</sup> <https://toronto.ctvnews.ca/ontario-introduces-shortened-isolation-periods-new-testing-guidelines-1.5723606>

<sup>34</sup> <https://www.cbc.ca/news/canada/toronto/ontario-covid19-march-1-vaccine-passport-system-1.6368222>

<sup>35</sup> <https://www.theglobeandmail.com/canada/article-ontario-lifts-class-size-covid-19-distancing-requirements-in-indoor/>

reproduction or amplification of sound.<sup>36</sup> Furthermore, Article 2 Section 591-2.1 states that no person shall emit or cause or permit the emission of continuous amplified sound, measured with a sound level meter at a point of reception in an outdoor living area.<sup>37</sup> This section further clarifies that amplified sound means sound exceeding a certain level of dB (the sound level in decibels using a sound-level meter with either A or C-weighting).

As the stage truck's technical capacities include the use of amplified sound exceeding 50 dB(A) or 65 dB(C), the event organizer will be required to obtain a Noise Exemption Permit for special events as specified in the permit guidelines.<sup>38</sup> Those renting the stage truck must apply for a Noise Exemption Permit at least four weeks before the event or activity is to occur, alongside a \$100 application fee. Since the stage truck will host small-scale events (with approximately 250-300 person capacity), a noise mitigation plan will be unnecessary, as this document is typically required for events with higher audience capacities.<sup>39</sup> Users must obtain a Noise Exemption Permit regardless of the type of property used for the event.

### Public and Private Property Permit Requirements

Users of the stage truck will need to consider the nature and location of their event to explore permitting requirements and opportunities, regardless of whether they intend for it to take place on municipal or privately-owned property.

For presenters interested in utilizing publicly-accessible spaces, the Parks, Forestry & Recreation division at the City of Toronto offers an Arts & Music in the Parks permit to eligible grassroots artists and presenters free of charge. This permit is designed to support equitable access to public space for grassroots and DIY artists; the City helps to support applicants for this and other permits through publicly-accessible infographics explaining eligibility and regulations.<sup>40</sup> Stage truck users who are grassroots artists or presenters holding either one performance or one event with multiple performances, that will not draw crowds of more than 250 people, maintain a noise level under 85dB, and whose events do not include regulated activities (e.g. selling or serving food) may be eligible for an Arts & Music in the Parks Permit.<sup>41</sup> To ensure quick processing of arts, music and movie night bookings in parks, the City has pre-approved locations in Etobicoke/York, North York, Scarborough and the downtown core.<sup>42</sup>

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<sup>36</sup> [https://www.toronto.ca/legdocs/municode/1184\\_591.pdf](https://www.toronto.ca/legdocs/municode/1184_591.pdf)

<sup>37</sup> Ibid.

<sup>38</sup>

<https://www.toronto.ca/wp-content/uploads/2021/06/8eb4-Noise-Exemption-Permit-Application-with-Disclaimer.pdf>

<sup>39</sup> <https://www.toronto.ca/wp-content/uploads/2019/09/9662-Noise-Mitigation-Plan.pdf>

<sup>40</sup> [https://www.toronto.ca/wp-content/uploads/2017/10/8f62-TP\\_AITP-Park-Permit-Diagram\\_v9.pdf](https://www.toronto.ca/wp-content/uploads/2017/10/8f62-TP_AITP-Park-Permit-Diagram_v9.pdf)

<sup>41</sup> <https://www.toronto.ca/wp-content/uploads/2017/11/913c-Arts-and-Music-at-Parks-Application.pdf>

<sup>42</sup>

[https://torontoartsfoundation.org/getattachment/Initiatives/Arts-in-the-Parks-\(1\)/Pages/Arts-in-the-Parks-Toolkit/CTA-TOOL-KIT/AITP-TOOL-KIT/AITP-Toolkit-2019.pdf.aspx](https://torontoartsfoundation.org/getattachment/Initiatives/Arts-in-the-Parks-(1)/Pages/Arts-in-the-Parks-Toolkit/CTA-TOOL-KIT/AITP-TOOL-KIT/AITP-Toolkit-2019.pdf.aspx)



Stage truck users may take advantage of the City's services to host their event in a publicly-accessible open space.

Depending on the event elements, stage truck users may be subject to special event requirements as defined by the City of Toronto.<sup>43</sup> Presenters must submit a Special Event in a City Park or Facility application should they choose to host their event at a City of Toronto site (e.g. Sherbourne Park, Sugar Beach) involving any of the following:

- the sale or service of alcohol;
- serving food to the public;
- amplified sound over 85dB;
- built structures or other more complicated elements.

Municipal stipulations around the use of vehicles in publicly-owned spaces are of special importance to users of the stage truck. As vehicles are generally not permitted in City of Toronto parklands, presenters utilising the stage truck must seek pre-event approval by the City of Toronto. Presenters may also need to complete an Emergency Action Plan should their event have more than 200 attendees.<sup>44</sup>

Stage truck users who plan to temporarily close a street fully or partially to occupy a curb lane, sidewalk or boulevard for an event must apply for a Street Closure Permit, issued by the Transportation Services division.<sup>45</sup> The Street Closure Permit grants permission to close a public roadway to vehicular traffic for up to four days, as long as local access for residents and emergency vehicles is maintained while the event is held. The user must ensure their event abides by street closure rules and bylaws in accordance with City of Toronto Municipal Code Chapter 743: Use of Streets and Sidewalks.<sup>46</sup> Based on the stage truck's orientation towards audience capacities below 300, the user will be required to apply for the permit at least eight weeks prior to the first day of the proposed closure in any boulevard and on any local road.<sup>47</sup> The permit may have to be accompanied by an Emergency Action Plan, a Traffic Management Plan, and a Waste Management Plan.<sup>48</sup>

The grassroots and DIY music scene in Toronto has seen events take place in municipal Green P parking lots, and although the Toronto Parking Authority controls these lots, they are treated as private property. Users interested in holding their event on a Green P lot are required to directly contact the Toronto Parking Authority and provide information about their intended

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<sup>43</sup><https://www.toronto.ca/services-payments/venues-facilities-bookings/booking-park-recreation-facilities/simple-permit-booking/>

<sup>44</sup> <https://s.cotsurvey.chkmt.com/?e=112731&h=87ABFD6E1BA38F7&l=en>

<sup>45</sup> <https://www.toronto.ca/wp-content/uploads/2021/11/9778-TSStreet-Event-Application2020.pdf>

<sup>46</sup> [https://www.toronto.ca/legdocs/municode/1184\\_743.pdf](https://www.toronto.ca/legdocs/municode/1184_743.pdf)

<sup>47</sup> Ibid.

<sup>48</sup> <https://www.toronto.ca/wp-content/uploads/2021/11/9778-TSStreet-Event-Application2020.pdf>

event, including the desired location/lot number, exact dates and hours of the event (including setup and tear-down), and any additional equipment the event requires. For any other privately-owned spaces, including parking lots, construction sites, or industrial zones, stage truck users are expected to comply with the rules and regulations as set by the respective property owner.

In sum, stage truck users will have an opportunity to explore various types of outdoor spaces locally, and will be subject to correspondingly different sets of policies and regulations. The City of Toronto's bylaws, particularly around noise, extend to events occurring on both public and privately-controlled land. In previous consultations, stakeholders have noted the challenges of holding events on City-owned spaces; the ease of applying for the use of a site in the public or private realm may stand as a key factor in users' site selection, but will be an independent choice as the stage truck enjoys geographic flexibility. The stage truck proprietor may choose to provide advice or recommendations to support best practices, and require the user to demonstrate their due diligence in selecting a site that is conducive to the vehicle's safe operation. While the responsibility of meeting all permit requirements pertaining to the use of space will be carried out by the individual or organization renting out the stage truck, this section has outlined basic considerations that may help to inform site selection in relation to the use of a vehicle with amplified sound for special events purposes.

## **Programming and Operations**

The stage truck seeks to ameliorate the conditions artists, presenters, and other members of the non-profit music sector face in staging musical performances. Achieving the stage truck's more qualitative benefits demands a thoughtful business model which considers the needs and recommendations expressed by its intended users. As such, the stage truck's stated goals of equity, access, and inclusion are to be carried out in part or in full by its programming and/or operating model.

There are a number of approaches the stage truck's future proprietor may choose from to enact its real use value, informed in part by the nature of the organization. Along the same vein, the meaning of equity can differ across industries and sectors. For example, a public sector entity might work from pre-existing policy to identify equity-deserving groups, and correspondingly develop eligibility criteria and tiered fees. On the other hand, a private sector program may take a more market-oriented approach, whereby a business mandate around operational excellence and customer service represents the means to achieving goals around access and dynamism. A social enterprise model might adopt a mix of the two to treat the stage truck as a competitive resource, but bound by an EDI or other strategic framework. Though the specific epistemology and outcome requires determining, the organizer should be motivated to manage the stage truck as an equity-oriented venue resource. Regardless of its specific location in relation to the

economic system, a venue that has a transparent application process, flexible timelines, competitive prices, and consistent customer service inherently represents a step towards lowering barriers in the music sector.

### Equity and Access

The research and stakeholder engagement processes underscored ongoing issues around inequitable access to public spaces for creative use in Toronto. While the stage truck cannot singlehandedly resolve chronic issues around access and inclusion, it represents an attempt to mitigate some of the day-to-day challenges for artists and presenters looking to engage the urban terrain. In the context of the stage truck, an equitable approach equates to one where the experience of exploring and utilizing the resource is marked by flexibility, efficacy, and creative autonomy.

The following recommendations stem from discussions with stakeholders, outlining key considerations to leverage the stage truck as a truly viable venue option to its users:

- The stage truck proprietor must ensure that DIY presenters and performers living outside the city centre enjoy the same level of access to the vehicle as those who work and live in Toronto's downtown core.
  - This may include partnering with local organizations in different areas of the city that would be able to facilitate outreach and support for groups in need.
- The stage truck's administrative and operational scheme should be such that it confers creative control to its user to the greatest degree possible in accordance with safety regulations. Mandatory staffing around the vehicle should pertain only to its basic set up and tear-down protocols; users should not feel that their creative process is under undue supervision.
  - Furthermore, creative control should extend to users' ability to customize the stage and surrounding area, through the vehicle's built form (e.g. hooks for user-supplied lighting, posters and banners) and regulations.
- The stage truck should represent a production enhancement tool, rather than a concierge service or one-stop-shop venue resource, in order to maximize users' flexibility. It should not be accompanied by additional 'venue' resources, such as fencing or box office infrastructure, as some users may wish for their event to be open-access.
- The fee structure of the stage truck should be attuned to the budgets of DIY and grassroots presenters. A sliding scale model should be considered to accommodate equity-deserving communities wishing to utilize the vehicle for an event.
  - The stage truck's proprietor should not require any specific revenue model for the event itself (i.e. the ticketing scheme is up to the presenter to decide, as long as they can fulfill all stage truck-related fees)

These suggestions underscore the relational nature of the stage truck’s operating model and its value-based drivers.

Operating Model

As the stage truck represents a design proof without a confirmed administrator, the report does not build out a concrete operating model which would inevitably require significant amendment. The ‘Operations and Management Toolkit’ (Figure 9) outlines each element of the stage truck booking and use process that the operator will need to confirm. Though there is no one-size-fits-all solution across all the possible hosts of the stage truck, commentary on best practices are provided wherever possible.

Figure 9: Operations and Management Toolkit

Phase	Considerations	Comments
Eligibility	Who is eligible to apply?	The stage truck is driven by a mandate around DIY and non-profit use, but the proprietor may consider allowing commercial/for-profit groups to rent it at market rates if they can demonstrate a community-oriented use.
	What types of events can the stage truck be used for?	The stage truck should chiefly serve live music performances. The proprietor may elect to implement parameters around the event content or the nature of its organizer (i.e. no discriminatory agendas, no hateful messages).
	Can individual musicians apply to use the stage truck?	Individual musicians/bands should be able to independently access the stage truck for performances (i.e. not under the banner of another collective). However, the proprietor may request a separate contact person who will not be onstage during the performance.
Applying	How far in advance of the event date can users apply to book the stage truck?	The application process should reflect the needs of its users and be informed by industry conditions, especially for DIY groups that work on a shorter event planning timeline. The stage truck’s booking slots should not fill up in advance of the season; the proprietor may elect to ‘hold’ select slots for last-minute bookings.
	How far in advance of the event date are users required to apply for use of the	The minimum time to apply should not exceed 2-3 weeks, but users should be

	stage truck?	welcome to apply earlier if they wish to.
	Is there an application fee?	To reduce barriers to entry, an application fee should not be required.
Bookings	How are applications reviewed (i.e. first-come-first-serve, case-by-case basis)?	If reviewed on a case-by-case basis, the operator may consider giving priority to events taking place outside of the downtown core, or to applicants representing equity-deserving groups in accordance with an EDI or other policy framework.
	Can there be last-minute booking options for pop-up events?	DIY and grassroots groups using the stage truck need a flexible booking model that accommodates pop-up events.
	How far in advance should presenters be able to know if they have the vehicle secured?	6 months prior to the event is a reasonable timeframe for users making plans in advance, but this can represent a guarantee rather than a cut-off date. There should be an ability for users to book on long (several months') and short-term (a few weeks') notice.  For equity purposes, users should not be able to get dates 'grandfathered in' for future seasons.
	How long is the operating season?	The stage truck's season will likely follow the general outdoor event calendar in Toronto (May to October). The proprietor should attempt to accommodate off-season booking requests if possible.
	How many times can a group book the venue in one season?	The proprietor may set a limit on the number of bookings or total length of time a group may use the stage truck in one season (e.g. three bookings or 5 calendar days' equivalent). Users should not be able to monopolize time slots during peak hours/days.
	In what increments can bookings be made (e.g. hourly, half-day/daily, multi-day, other)? What is the minimum/maximum length of time a user can hold the stage truck in one booking?	Half-day, daily, and multi-day bookings should be made available to applicants. The proprietor may set out parameters on multi-day events (e.g. the stage truck can be rented up to a maximum of three calendar days per booking).

	<p>Can there be multiple bookings a day?</p>	<p>While the stage truck is meant to be agile and enjoys a swift turnaround period, the proprietor must consider users' needs (i.e. renters should not have to worry about their stage arriving late). An exception to a 'one booking per day' policy may apply to events with a significant turnaround time (&gt;6 hours).</p>
<p>Fees</p>	<p>How are fees structured (by event type, by organizer type, by rental period, peak/off-peak hours, or a combination of these)?</p> <p>What is the payment schedule?</p> <p>Is a deposit required?</p>	<p>The cost of using the stage truck should see variance according to the user in question and their financial profile. A sliding scale or stratified fee schedule according to the organizer type/type of event is strongly recommended. Regardless of the specific fee structure, it should be clearly communicated to users before applying, such as through an informational webpage.</p> <p>Stage truck fees may be paid entirely prior to the event, or in installments. The proprietor may consider arranging individual payment plans for groups in need.</p> <p>As a rented piece of infrastructure, a refundable deposit is likely necessary for the stage truck, but should not represent an onerous expense for DIY users.</p>
<p>Additional Requirements</p>	<p>What, if any, documentation does a user need to provide prior to the event?</p> <p>What is the minimum insurance requirement? Can alternative arrangements be made?</p> <p>What contact information does the application need to provide?</p> <p>Does the user need to provide proof of secured permits as applicable?</p>	<p>The stage truck proprietor may request a brief description of the event and the organizing group to confirm eligibility, but must not represent an onerous bureaucratic load for the applicant.</p> <p>N/A</p> <p>Each application should have a dedicated contact who can be reached prior to and on-site during the event.</p> <p>Any additional documentation requested by the stage truck operator should pertain only to the safe and legal use of the vehicle. All fees and fines related to municipal bylaws are</p>

		<p>the user’s responsibility.</p>
<p>Day of Event</p>	<p>How far in advance does the vehicle need to show up at the site?</p> <p>Does the personnel member associated with the stage truck need to be present at all times, or only for set-up and tear-down?</p> <p>What will the user be allowed to access in terms of the stage truck’s equipment? Are they allowed to adjust lights or speakers?</p> <p>What type of equipment and materials will the user be allowed to bring? (e.g. decorations, lighting, additional staging)</p>	<p>The vehicle should arrive in time for the staging to be set up in full before attendees’ arrival (approx. 2-3 hours). There should also be sufficient time for musicians to complete a sound check.</p> <p>Whether or not the stage truck driver/technician remains on-site throughout the event, they should exemplify a strong commitment to accommodating clients’ needs and a service-driven approach.</p> <p>The stage truck proprietor may set a reasonable expectation that users are not to access the cab of the vehicle itself, but can assume as much control over the technical elements as feasible without placing the equipment at risk.</p> <p>The stage truck’s built form and policies should facilitate opportunities for clients to customize the stage and surrounding area for performances.</p>
<p>Post-Mortem</p>	<p>Does the operator require or request a follow-up meeting with the client?</p> <p>How will feedback be collected?</p> <p>How will fees or fines be charged to the user, if applicable?</p> <p>What are grounds for barring a user from re-booking the stage truck? (e.g. safety violation, nature of the event)</p>	<p>The proprietor should have a commitment to collecting feedback and developing positive working relations with clients, while avoiding a burdensome follow-up process. This may take the form of a short online questionnaire or informal conversation to gauge the clients’ experience and document any issues.</p> <p>N/A</p>

## Business Case

In order to assess the financial viability of the stage truck, the business case sizes Toronto's concert market, and outlines revenue models with detailed cost projections and an overall break-even analysis.

### Broad Use Case

#### *Attendance Rate*

Toronto's lively music scene has a large market of potential concert attendees; 53% of Torontonians identify as regular concert-goers.<sup>49</sup> As Toronto's population is just under 3 million people, approximately 80% of whom are adults, the city is home to an estimated 1.2 million regular concert attendees.<sup>50</sup> Although attendance rates are likely to wax and wane throughout the COVID-19 pandemic, the active concert scene in Toronto provides a prime arena for the stage truck to thrive. With just shy of 1000 concerts already scheduled to take place between April 2022 and April 2023 in venues of varying capacities, from 50 heads in DIY pop-ups to over 19,000 seats at the Scotiabank Arena, there are more regular attendees than concert spaces available on a day-to-day basis.<sup>51 52 53 54</sup> Residents of Toronto generate demand for live music, and the stage truck will supply this. It will become part of Toronto's strong ecosystem of over 500 venues, adding not only a musical space, but social, cultural, and economic advantages for the city too, as discussed in "The Case for a Mobile Music Venue".<sup>55</sup>

#### *Utilization Rate*

The utilization rate of the stage rests upon the number of days it is available, and the projected number of bookings during this period. As the stage truck is intended for seasonal usage through the warmer months of the year, spanning from May to October, it is available for 184 days annually. While vehicle maintenance and repairs should be conducted during the months when the stage truck is not in use, accounting for 2 emergency repair days each month and 6 days of inclement weather (derived from construction weather delay guidelines) leaves 168 available days of use.<sup>56</sup>

<sup>49</sup>[https://torontoartsfoundation.org/tac/media/taf/Research/Toronto%20Arts%20Stats%202015/Toronto-Arts-Stats-2015-Booklet-FINAL\(2\).pdf](https://torontoartsfoundation.org/tac/media/taf/Research/Toronto%20Arts%20Stats%202015/Toronto-Arts-Stats-2015-Booklet-FINAL(2).pdf)

<sup>50</sup><https://www.toronto.ca/wp-content/uploads/2017/10/96d7-2016-Census-Backgrounder-Age-Sex-Dwelling-Type.pdf>

<sup>51</sup> <https://www.scotiabankarena.com/venue-information/about>

<sup>52</sup><https://www.songkick.com/metro-areas/27396-canada-toronto?utf8=✓&filters%5BminDate%5D=&filters%5BmaxDate%5D=>

<sup>53</sup> <https://www.ticketmaster.ca/discover/concerts/toronto?daterange=from20220403-to-20230403>

<sup>54</sup> <https://concertsto.com>

<sup>55</sup> <https://www.toronto.ca/wp-content/uploads/2017/08/961d-backgroundfile-90615.pdf>

<sup>56</sup> [https://owwa.ca/files/Committees/OWWA\\_Weather%20Delays\\_Feb%2010%202020.pdf](https://owwa.ca/files/Committees/OWWA_Weather%20Delays_Feb%2010%202020.pdf)



Stage truck counterparts in Ontario experience a range of utilization rates. While the now-defunct St. Catharines Showmobile was still in use, its administrators reported an average of 10 bookings per season. The City of London Showmobile was used 19 times in the 2019 season, with about 1 booking a week. However, these numbers represent a low utilization rate, as Welland's Showmobile is used frequently, with summer bookings beginning in April and starting to fill out at the start of the season.<sup>57</sup> Given Toronto's dense summer concert season, and the substantially higher frequency of music events, regular concert-going population and organizer ecosystem, the projected utilization rate of the stage truck is at least 3 bookings a week. This results in 36 bookings per season, and a projected minimum utilization rate of 21%.

### Revenue & Financing Models

The stage truck's revenue will be generated through rental fees. A number of revenue models exist for the stage truck, including a free use model, a market-based model, and a margin-based scheme. The latter two models may use half-day, daily and/or multi-day rental rates. The final revenue model selected will likely depend upon the source of financing for the stage truck. Three potential financing models exist: grant-funded, City-funded, and privately-funded (whereby the stage truck may or may not be associated with Wavelength).

#### *Revenue Model 1: Free Use*

City and grant funding may allow for the opportunity to advance Toronto as a Music City by covering all the costs associated with the stage truck, to ensure its accessibility to DIY presenters. In this revenue model, the stage truck proprietor absorbs all operating costs, with the performers required to bring insurance and the instrumentation they desire. However, this proposition received pushback from a City representative, and requires significant support and even grant-bolstering to bring it to life. As arts industry grants in Ontario vary year-to-year, a grants-based program would be unpredictable and potentially crippling to the longevity of the stage truck. Thus, Revenue Model 1 will only function if a benefactor steps in, and remains to be a less probable pathway.

#### *Revenue Model 2: Market-based*

With the aim of providing an accessible venue, an examination of current market rates yields a benchmark figure that can serve as parameters to the stage truck's fees. While alternatives to the stage truck are generally larger, and offer a trailer rather than a built-in stage, the pricing models of these alternatives can be used to roughly benchmark market rental rates. The locations examined represent Toronto, as well as smaller Ontario municipalities. While some outdoor stage offerings, such as the City of London's, are inclusive of AV equipment costs, others are accompanied by significant additional fees. The table below (Figure 10) breaks down the stage truck counterpart rental fees for the City of London, City of Welland, and in Toronto

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<sup>57</sup> <https://www.thepublicopinion.com/story/news/local/2013/08/03/he-showmobile-must-go-o/46206805/>

across the private and public sectors. Rental cost per square foot of usable floor space was examined due to the stage truck’s comparatively smaller dimensions. While this value ranges from 61 cents per sq ft to \$2.15 per sq ft, smaller floorspace does not guarantee a lower rental rate; the stage truck’s smaller size still provides an outdoor stage, and thus daily rental costs across Ontario guide the market-based revenue model.

This brief market scan reveals significant overall cost differences between Toronto and elsewhere in Ontario, which is widened further by extra AV tech charges. Benchmarking rental fees further supports the case for building the stage truck as an accessible DIY venue in Toronto.

Figure 10. Tabulated Breakdown of Pre-Tax Rental Fees for Ontario Stage Truck Alternatives

To ensure synchronicity across case studies, the rental cost is quoted for commercial use on the first day of hire.

Location	Rental Cost (\$/day)	Private entities	Public entities	Notes & Extras
		Rental Cost/sq ft (\$)		
City of Welland <sup>58</sup>	460	0.61		<ul style="list-style-type: none"> <li>36 ft x 21ft</li> <li>Only daily rates offered</li> <li>AV and generator available for a fee</li> </ul>
City of London <sup>59</sup>	693.55	1.27		<ul style="list-style-type: none"> <li>42ft x 13ft</li> <li>Reduced administrative feed for events under 8 hours</li> <li>Includes AV equipment</li> </ul>
Toronto (1 - City-Owned Showmobile)	4500	vehicle/stage model unknown		<ul style="list-style-type: none"> <li>Currently defunct</li> </ul>
Toronto (2) <sup>60</sup>	2200	1.72		<ul style="list-style-type: none"> <li>40 ft x 32 ft</li> <li>Reduced charge for extra days</li> <li>\$2640 AV charge</li> </ul>
Toronto (3) <sup>61</sup>	1550	2.15		<ul style="list-style-type: none"> <li>36' x 20'</li> <li>Reduced charge for extra days</li> <li>\$2640 AV charge</li> </ul>

<sup>58</sup> <https://www.welland.ca/facilities/showmobile.asp>

<sup>59</sup> <https://london.ca/special-event-support>

<sup>60</sup> <https://www.rentastage.ca/contact/>

<sup>61</sup> <https://www.rentastage.ca/contact/>

With daily rental fees in Toronto starting at over \$4000, the stage truck can position itself in the market as a more affordable option. The proprietor can spur significant competition by comfortably pricing the rental rate at below \$4000, with the option of mirroring the City of London's rates to increase accessibility. The proprietor may also wish to merge a market-based revenue model with the margin-based revenue model (see 'Revenue Model 3'), to balance the financial viability of the stage truck with its DIY-friendly mandate.

#### *Revenue Model 3: Margin-based*

A margin-based revenue model aims to recoup the upfront investment, fixed, and variable costs associated with the stage truck within a given timeframe. While this timeframe will be chosen by the proprietor, 3-year and 5-year break-even models are listed below, and call for each booking charge to total \$1918.38 and \$1500.78, respectively. These rates are highly competitive in comparison to Toronto's current offerings, and the margin of profit can be adjusted from 0% by the proprietor if desired, in order to offer a sliding scale model.

## Cost Projections

### Upfront Investment

#### *Equipment Costs*

The final estimate for the upfront equipment cost of the stage truck is **106,000 CAD**. This accounts for Ontario's HST rate of 13%, and includes a further budget buffer of 20%. According to a Toronto-based Audio Visual Technician, expense leeway for a project requiring a wide range of equipment should fall within the range of 13-20% to take unexpected costs and price fluctuations into consideration. In order to ensure the financial viability of the stage truck, a conservative 20% buffer was chosen, with the hope of using the final estimate as an all-inclusive quote to pitch the stage truck to potential investors.

The detailed total cost breakdown is as follows:

Pre-tax estimate: \$78125.37

Taxed estimate: \$88281.67

20% buffer: \$105938.00

Figure 11 contains a complete list of all the foreseeable equipment required for the stage truck, alongside the total estimated cost for each item. The methodology used to procure these estimates follows a 3-step process:

1. Source 3 quotes for the required item, heeding specification and brand advice from an Audio Visual Technician based in Toronto.
  - a. Ensure that every item is compatible with one another and for use in the stage truck. For example, the sub stands must have the capacity to support over 50kg, to guarantee they work with the recommended subwoofers.

- b. Conduct market scans to ensure the prices quoted are representative of marketplace options. Long & McQuade was used as the primary marketplace, due to its strong reputation and competitive rates.
  - c. Please note that all equipment reviewed for the cost projection is in new condition, as the Client expressed a preference to avoid degraded equipment.
2. Determine the average price for each piece of equipment based on provided quotes.
  3. Establish the total cost of each item by accounting for the volume required.

Figure 11: Detailed Stage Truck Inventory with Estimated Costs

Category	Equipment	Total Cost
Vehicle	Chevrolet P30	10533.65
Audio	Public Address (PA) system x2	2578
	Subwoofer x2	3379.32
	Sub stands x2	206.66
	Monitors x6	4117.98
	Base amp w 2 woofers (backline) x2	2,866.64
	Guitar Amp (backline)	2389.99
	Consoles [Behringer, iPad]	1064
	DI Box - Passive x6	207.96
	DI Box - Active x4	333.28
	DI Box - Stereo x2	546.64
	DI Box StageBug series x11	1411.52
	Microphones [clip on] x6	1234.02
	Microphones [built in kick]	196
	Microphones [clip on drum] x5	1033.2
	Microphones [overhead drum] x2	532.62
	Microphones [unidirectional] x4	529.32
Microphones [mic stand] x4	217.28	
Power	Cables [instruments; patch cables] x12 of each length	2215.68
	Cables [mic] x12 of each length	4498.32
	Generator x2	672.64
	Cable mats (200ft at least)	7124.11
Lighting	LED Parcan x7	1899.31
	Par Can uprights x4	1276

	Moving Head wash x4	3651.96
	Moving head spots x2	2255.98
	Lighting box = laptop	0
Musical Instruments	Drum Sticks	42.91
	Drum Kit	1016.66
Cases and Support Structures	Chain hoist (for PA)	396.25
	Tarp Straps (for speakers and drums) x 20	86
	Tarps (for speakers and drums) x5	545.3
	Road cases (for 12in speakers) x8	8365.36
	Road cases (for 18in speakers) x2	2390.9
	Road cases (for amp) - x2	1591.34
	Road cases (for amp)	793.33
	Road cases (for cymbals)	165.16
	Road cases (for 5 piece drum kit)	433.33
	Keyboard stand	55.82
Decorations	Drapery (at least 32ft required, accommodating 7ft height)	294.58
	Wrap	4916.67
	Disco ball	59.68
	<b>TOTAL COST (pre-tax)</b>	<b>78125.37</b>
	<b>TOTAL COST w HST</b>	<b>88281.67</b>

A full table, with quote breakdowns and notes on marketplace availability and technical specifications, can be found in Appendix C. Quotes are accurate as of March 2022, and are listed in Canadian Dollars.

#### *Labor & Build Cost*

In order to successfully repurpose the Chevrolet P30 truck, an Ontario-based specialist vehicle modification company, Raytel Fleet Outfitters, have quoted a pre-tax build cost of \$5605, with a lead time of 2-3 weeks.<sup>62</sup> This includes high-load capacity foldable shelving units, and steel tracks to support strapping down the equipment. Thus, the post-tax cost is \$6333.65. Allowing for a 20% financial buffer brings the final estimate to approximately 8000 CAD.

**Total Upfront Cost: 114000 CAD**

<sup>62</sup> <https://www.fleetoutfitters.com>

## Fixed Costs

### *A Note on Warranties*

In order to establish grounds for and/or against equipment warranties, a cost-benefit analysis was performed based on Long & McQuade's warranty policy. Recommended by both the Client and an Audio Visual Sound Technician, Long & McQuade was selected for its convenience, price, and reputation within the Canadian music community. Much of the stage truck's equipment will likely be purchased from Long & McQuade, partially due to its convenient local store-based equipment drop-off and pick-up, competitive rates for equipment, and favourable lifetime warranty in comparison to manufacturers. Long & McQuade's Performance Warranty policy therefore forms the baseline of the warranty cost-benefit analysis; the first year of warranty coverage is free for new equipment, with subsequent years costing 4% of the current new selling price. In this cost-benefit analysis, the cost of replacing equipment is directly compared with the cost of continual, annual warranties for its projected lifespan. This analysis serves as a rough guide for the truck's warranty decisions.

Assuming that the current retail price of the item remains constant, we can assign the following values:

X = equipment lifespan (years);

Y = original cost, where  $Y > 0$ ;

W = warranty cost.

Thus, according to the terms set out above, purchasing a warranty makes financial sense if:  
 $W < Y$ .

We also know:  $W = 0.04(X-1)Y$

*4% of the original cost, multiplied by the lifespan of the equipment (minus a year to account for Long & McQuade's free year of coverage)*

Therefore, if  $0.04(X-1)Y < Y$ , a warranty should be purchased.

Solving for X demonstrates that if the equipment lifespan is less than 26 years, purchasing a warranty makes financial sense and should be seriously considered.

[Solution:

$$0.04(X-1)Y < Y$$

$$0.04X - 0.04 < 1$$

$$0.04X < 1.04$$

$$X < 26, \text{ where } Y > 0]$$

In order to establish warranty cost projections for the stage truck, representative equipment was used to examine the average lifespans for speakers, solid state amps, tube amps, DI boxes, microphones, cables, LED lights, and the drum kit. Road cases are excluded from this analysis, as their very design rests upon ruggedness and durability. Moreover, preferred

suppliers, such as Gator and Odyssey, cover the costs of manufacturing defects.<sup>63 64</sup> As the drumsticks and the drumkit are ‘consumable’ items that are expected to undergo wear and tear, Long & McQuade’s warranty policy does not cover drum head and stick replacement, hence these items are also excluded from warranty analysis, but can be found under ‘Equipment Replacement’ in the “Variable Costs” section. The cost-benefit analysis (Figure 12) uses conservative lifespan estimates to examine a series of ‘worst case scenarios’ resting on constant stage truck usage, to ensure that the fixed cost estimate has a wide berth of maneuvering space; it is envisaged that fewer warranties will be purchased in consultation with the Client, potential funders, and Audio Visual Technicians.

Figure 12: Representative Equipment Warranty Cost-Benefit Analysis

Equipment	Cost (\$)	Approx. Longevity (X years)	Cost of warranty for X years (\$)	Warranty cheaper than replacing?
Speaker: Yorkville PS12P (Public Address System)	1289	15 <sup>65</sup>	Year 1: covered by Long & McQuade  Subsequent years (from Long & McQuade): 51.56  ∴ total cost: 721.84	Yes
Solid State Amp: Ampeg Rocket Bass RB-210	869.99	30 <sup>66</sup>	Year 1: covered by Long & McQuade  Subsequent years (from Long & McQuade): 34.80  ∴ total cost: 1009.20	No
Tube Amp: Fender ‘65 Twin Reverb 120V	2499.99	10 <sup>67</sup>	Year 1: covered by Long & McQuade  Subsequent years (from Long & McQuade): 100.00  ∴ total cost: 900	Yes
Direct Box: Radial Pro 48	129.99	20 <sup>68</sup>	Year 1: covered by Long & McQuade  Subsequent years (from Long & McQuade): 5.20  ∴ total cost: 98.8	Yes, but marginally so; lifespan fluctuations around the quoted average may render the 24% an obsolete saving

<sup>63</sup> <https://www.gatorcases.com/warranty/>

<sup>64</sup> <https://odyusa.co/odyssey-warranty-policy.php>

<sup>65</sup> <https://www.soundandcommunications.com/aging-gracefully-expected-life-sound-system/>

<sup>66</sup> <https://musicgearzone.com/how-long-do-guitar-amps-last/>

<sup>67</sup> <https://musicgearzone.com/how-long-do-guitar-amps-last/>

<sup>68</sup> <https://www.soundonsound.com/sound-advice/q-do-need-use-di-box>

Microphone: Sennheiser e604	189.95	30 <sup>69</sup>	Year 1: covered by Long & McQuade  Subsequent years (from Long & McQuade): 7.60  ∴ total cost: 228	No
Cables: Yorkville 25ft Standard Series	29.99	9 <sup>70</sup>	Year 1: covered by Long & McQuade  Subsequent years (from Long & McQuade):1.20  ∴ total cost: 10.80	Yes, but cables are a low-ticket item for the stage truck; procuring emergency funds for new cables may be viable, and moreover, the cable lifespan estimate is hugely variable, and rests upon use levels & heat of the cable's PVC coating <sup>71</sup>
LED Parcan: American DJ 5PX HEX LED	299	27 <sup>72</sup>	Year 1: covered by Long & McQuade  Subsequent years (from Long & McQuade): 11.96  ∴ total cost: 310.96	No

As demonstrated by Figure 13, warranties are recommended for speakers and tube amps, and should be considered for direct boxes and cables. Once Long & McQuade’s free one-year warranty has elapsed, the annual cost for warranties is estimated to be approximately 900 CAD. Detailed costs can be found in Figure 13 (below).

<sup>69</sup> <https://newmusicworld.org/what-is-the-life-span-of-a-microphone/>

<sup>70</sup> [https://www.miccltd.com/cms-files/Electrical\\_cables\\_-\\_Life\\_Span...\\_Its\\_not\\_what\\_you\\_think\\_-\\_White\\_Paper.pdf](https://www.miccltd.com/cms-files/Electrical_cables_-_Life_Span..._Its_not_what_you_think_-_White_Paper.pdf)

<sup>71</sup> [https://www.miccltd.com/cms-files/Electrical\\_cables\\_-\\_Life\\_Span...\\_Its\\_not\\_what\\_you\\_think\\_-\\_White\\_Paper.pdf](https://www.miccltd.com/cms-files/Electrical_cables_-_Life_Span..._Its_not_what_you_think_-_White_Paper.pdf)

<sup>72</sup> Lifespan of 55,000 hours. Assuming that the stage truck is used on all of its available 168 days, for 12 hours each day - which accounts for travel, set up, and tear down time - then the maximum number of hours in use is 2016/year, resulting in an estimated lifespan of 27 years.



*Figure 13: Estimated Warranty Costs*

Average equipment quotes from Figure 11 are used to calculate costs.

Equipment Category	Total Cost (\$)	Lifespan (years)	Annual Warranty Cost from Year 2+ (\$)
Speakers (PA, subwoofer, monitors)	10075.30	15	403.01
Tube Amp (Guitar amp)	2389.99	10	95.60
DI Boxes (passive, active, stereo, StageBug)	2499.40	20	99.98
Cables (instruments, microphones)	6714	9	268.56
Total			867.15

### *Insurance*

Insurance required for the stage truck to operate is two-fold. Firstly, stage truck renters must purchase liability insurance covering up to \$5 million, on par with benchmarked stage truck requirements. As this cost is incurred by the user, it does not factor into the stage truck's cost breakdown.. If the stage truck is owned and operated by Wavelength, then Wavelength's current liability insurance may be expanded to include the stage truck, or a separate insurance policy may be purchased for each event. Additionally, the stage truck driver must have automobile insurance for the movement of the stage truck between event locations, the exact rate of which will be consolidated by the proprietor at a later stage.

### *Storage*

While storage options require in-depth exploration by the proprietor, this cost projection accounts for yearly rent of truck storage space in Toronto. Rental spaces in Toronto that accommodate trucks cost approximately \$200/month outdoors, and \$670/month indoors.<sup>73 74</sup> In order to prioritize the safety of the stage truck and to safeguard it from inclement weather during the winter months, an indoor storage option is the most prudent. Thus, the total annual rental cost is estimated to be \$8040. Ideally, this expense is eliminated entirely if the stage truck can be housed free of charge on private property, or in a City-owned depot if the stage truck is municipally-funded.

<sup>73</sup> <https://www.accessstorage.ca/en/self-storage/toronto/yonge-steeles/>

<sup>74</sup> <https://www.accessstorage.ca/en/self-storage/toronto/yorkdale/>

## Variable Costs

### *Fuel*

Fuel costs depend on the stage truck's movement within Toronto, which stretches 26.7km from east to west.<sup>75</sup> If the stage truck journeys across the city twice on every use day, then the stage truck requires fuel for 1922.4 miles. With fuel costs rapidly increasing and fluctuating in 2022, it is difficult to obtain an accurate estimate for fuel charges for the Chevrolet P30. The P30 models examined in the equipment cost projections use gasoline fuel, which is listed as 169.8 cents per litre as of April 4th, 2022 (178.8 cents per litre including tax).<sup>76</sup> With an average fuel efficiency of 6 miles per gallon, the total fuel estimate for the stage truck is \$2200 including tax.<sup>77</sup>

### *Equipment*

Certain pieces of equipment require regular replacement, and the following cost estimates assume conservative values of lifespan and cost to pre-empt a 'worst case scenario'. Tube valves inside guitar amps, drum heads and drum sticks require replacement every 6 months.<sup>78</sup>  
<sup>79</sup> <sup>80</sup> As the stage truck equipment inventory covers 4 pairs of drum sticks, this cost will be incurred every second year. With tubes priced at approximately \$150, and drum heads at \$140, the total annual equipment replacement cost, post-tax, is projected to be \$330 in year one, \$655 in year two, \$700 in year three (accounting for drum sticks), \$655 in year four, and \$700 in year 5.<sup>81</sup> <sup>82</sup> The cost pattern of \$655 and \$700 is hereafter projected to continue.

Each year, maintenance and repair work may also be required by the truck itself. Using industry standards, truck maintenance and repair costs are estimated to be 11 cents per mile driven.<sup>83</sup> <sup>84</sup> With an estimated travel log of 1992.4 miles driven, vehicle maintenance and repair costs are projected to be approximately \$220.

As the cost estimate in these projections cover a 5-year timeframe, the replacement cost for other pieces of equipment is estimated to be \$0. This is because equipment with shorter

<sup>75</sup> <https://www.toronto.ca/city-government/data-research-maps/toronto-at-a-glance/>

<sup>76</sup> <https://www.ontario.ca/page/motor-fuel-prices>

<sup>77</sup> <https://www.fuelly.com/car/chevrolet/p30>

<sup>78</sup> <http://www.avalonmusic.net/new-page>

<sup>79</sup> <https://www.drummingbasics.com/how-often-should-you-replace-drum-sticks/>

<sup>80</sup> <https://drummingcorner.com/how-often-should-you-change-your-drum-heads/>

<sup>81</sup> [https://www.long-mcquade.com/12790/Guitars/Parts/Groove\\_Tubes/GT-EL34MQ - Mullard RI Quartet - Medium.htm](https://www.long-mcquade.com/12790/Guitars/Parts/Groove_Tubes/GT-EL34MQ_-_Mullard_RI_Quartet_-_Medium.htm)

<sup>82</sup> <https://www.long-mcquade.com/75239/Drums/Drum-Heads/D-Addario/Strata-1000-Concert-Bass-Drum-Head--3-2-Inch.htm>

<sup>83</sup> <https://www.lrrb.org/pdf/200319.pdf>

<sup>84</sup> <https://www.thetruckersreport.com/infographics/cost-of-trucking/>

lifespans are assumed to be covered by warranties, with the rest of the equipment estimated to have a lifespan far beyond 5 years.

### *Wages*

As the projected use of the stage truck is 36 days per season, a freelance technician-cum-driver is required onsite at all times, for the purpose of equipment safety and truck security. As some events may span multiple days, while others may last half a day, an average event time of 12 hours is assumed. The Client suggested an appropriate hourly wage rate of approximately \$45, and thus projected wage cost each year is \$19,440.

Total variable costs in year one of operation are estimated to be \$22,190, and \$22,515 in year two.

*Figure 14: Summary of Costs*

Year 1	
Cost Projection Estimate	Value (CAD)
Upfront	106000 (equipment) + 8000 (build) = 114000
Fixed (annual)	8040 (storage)
Variable (annual)	19440 (wages) + 2200 (fuel) + 330 (equipment) + 220 (maintenance and repairs) = 22190
Total	144230
Year 2+	
Cost Projection Estimate	Value (CAD)
Fixed (annual)	900 (warranties) + 8040 (storage)
Variable (annual)	19440 (wages) + 2200 (fuel) + 655 (equipment; varies) + 220 (maintenance and repairs) = 22515
Total	31455

*Figure 15: Break-even Analysis*

Operational Year	Cost (CAD)
1	144,230
2	31,455
3	31,500
Total across 3 years	207,185
4	31,455
5	31,500
Total across 5 years	270,140

Although it is desirable for the 21% stage truck utilization rate to rise year after year, the following calculations assume it remains constant for the continued sake of caution.

Break-even after 3 years:

[\$207,185/(108) bookings] requires a rental charge of \$1918.38 per booking.

Break-even after 5 years:

[\$270,140/(180) bookings] requires a rental charge of \$1500.78 per booking.

In accordance with rental benchmarking, the stage truck model is financially viable, as it slashes Toronto rental rates by half, even if a shorter 3-year break-even time frame is selected.

### Limitations

Several limitations arise regarding the build and operational functioning of the stage truck. Firstly, the Client expressed a desire to use equipment in new condition for the stage truck, yet global supply chain issues have wreaked havoc on the AV industry. While products manufactured by locally-based brands, such as Yorkville, are usually available, many pieces of equipment are out of stock, including lighting fixtures which have been on backorder for years. Additionally, fuel costs and shortages may pose challenges to the stage truck's mobility; the proprietor must maintain a keen view of the economic situation as it evolves.

## Next Steps

This report represents a feasibility study for the stage truck concept for use by the DIY, grassroots, and non-profit music sector in Toronto. Its conceptualization and analysis, guided by principles of equity, accessibility, and operational excellence, underscores key considerations with respect to the stage truck's physical design, as well as its programming and operations as an alternate music venue. A thorough assessment of Toronto's music ecosystem, opportunities for concert presentation, and stakeholders' needs confirms the stage truck as a positive contribution to the landscape in the current moment and beyond.

While the stage truck awaits a proprietor, the report catalogues a range of considerations and constraints to help support the decision making process. It explores various pathways the stage truck may enter (ie. public, private, social enterprise) and their respective strengths and weaknesses, effectively serving as a blueprint for any entity with an interest in assuming its operation. Though we offer stakeholder feedback and industry-informed commentary wherever possible, further development of the stage truck requires a consolidated policy and operating scheme to make it a meaningful venue option for DIY/grassroots presenters and performers.

As a design proof, the build of the vehicle incorporates expertise in audio-visual technology and architectural design. In the future, it will require professional assessment by a licensed automotive engineer to ensure its structural feasibility, safety, and adherence to regulations. It is strongly recommended that the stage truck's ongoing development is grounded in principles of supporting the non-profit music sector, and that it engages stakeholders whenever possible. In other words, the most impactful stage truck iteration will be one where its planners and users operate along the same wavelength.

### **Appendix:**

- A. Design Review Panel: Engagement Summary
- B. List of Interviewees
- C. Detailed Cost Analysis
- D. Design Renders