

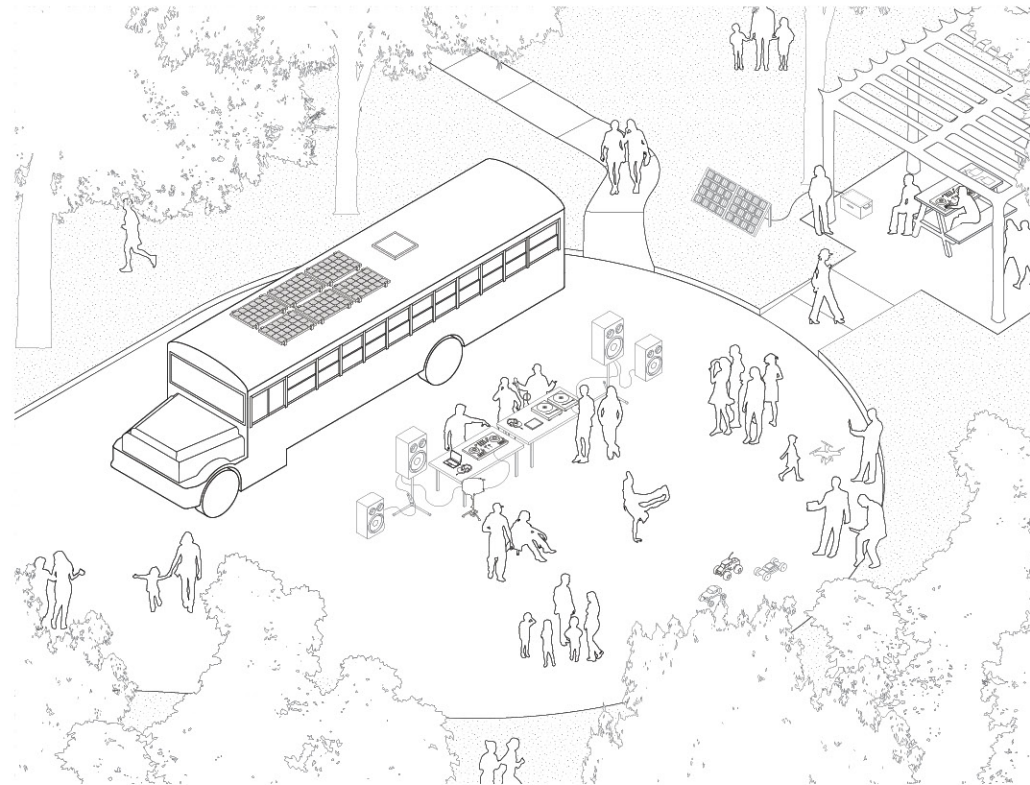
THE HIP-HOP XPRESS

Double Dutch Boom Bus





The Hip-Hop Xpress is an internet-connected mobile classroom, recording studio, and performance venue that links communities across our state through a variety of programmed events and outreach initiatives. Inspired by George Washington Carver's Jesup Wagon, Xpress travels to parks, community centers, schools, universities, and parking lots to spark connections among different generations, highlight Black cultural legacies, and invite young people to try new activities, all inspired by Hip Hop and its antecedents.



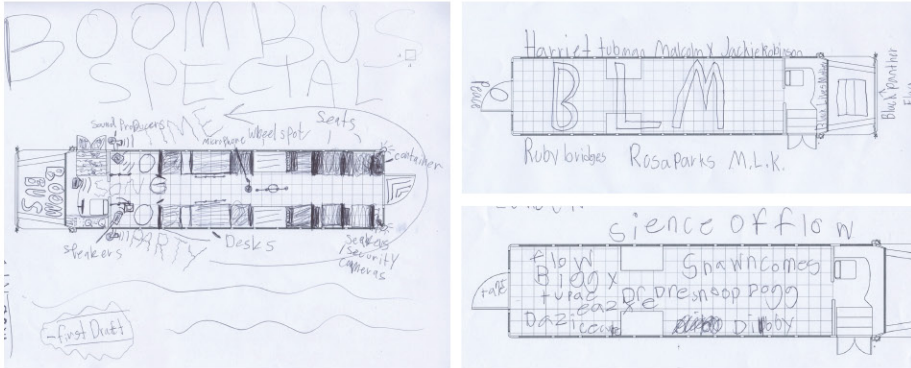


SEMINAR

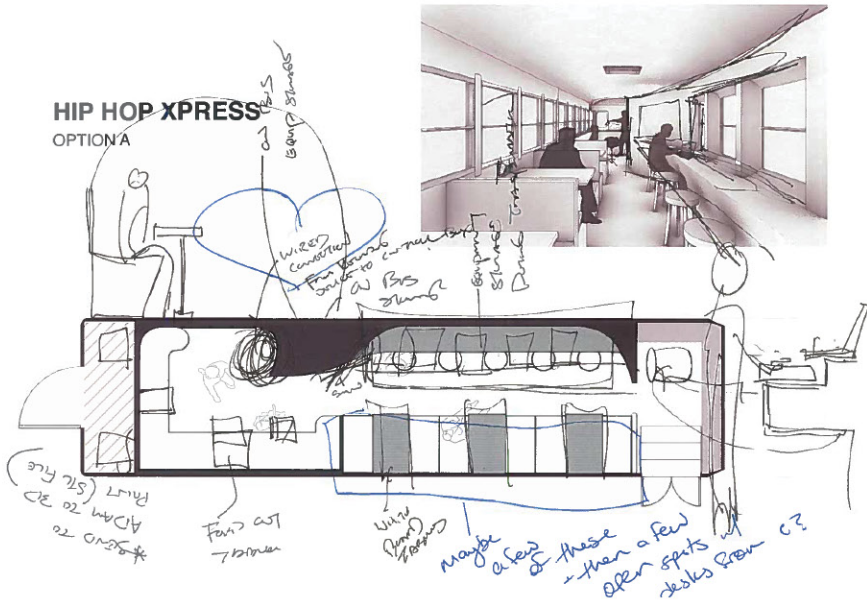
Over sixty students – freshman to doctoral – from music, architecture, engineering and business participated in a 3-credit seminar lead by faculty and community leaders. Our goal, bring a diverse group of individuals together, discuss hip-hop from different perspectives, and create a mobile laboratory. Youth from the Boys & Girls Club and other constituencies attended our weekly course in what we term as *communiversity*.

ENGAGEMENT

Our team undertook a multi-year process of engagement with various community stakeholders, hosted participatory design events, and toured the emptied bus to test a variety of functions. Three primary needs emerged that helped shape the interior configuration: a gathering space for collaboration, a multi-purpose workbench, and seating booths for focused work.



We LOVE Her !!





Computer

POWER

TABLE

CARGO NET

SUB WOOF.'S

STORAGE BIN

TS

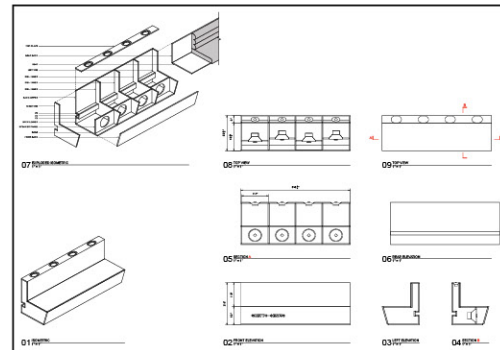
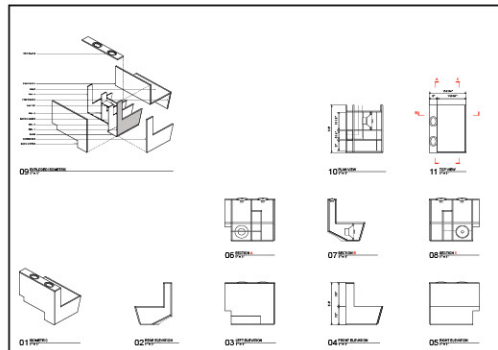
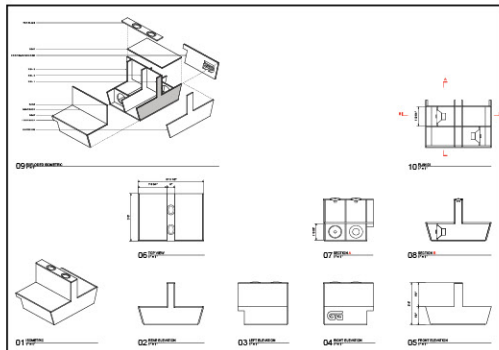
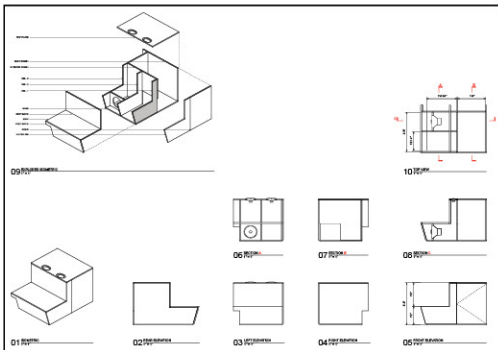
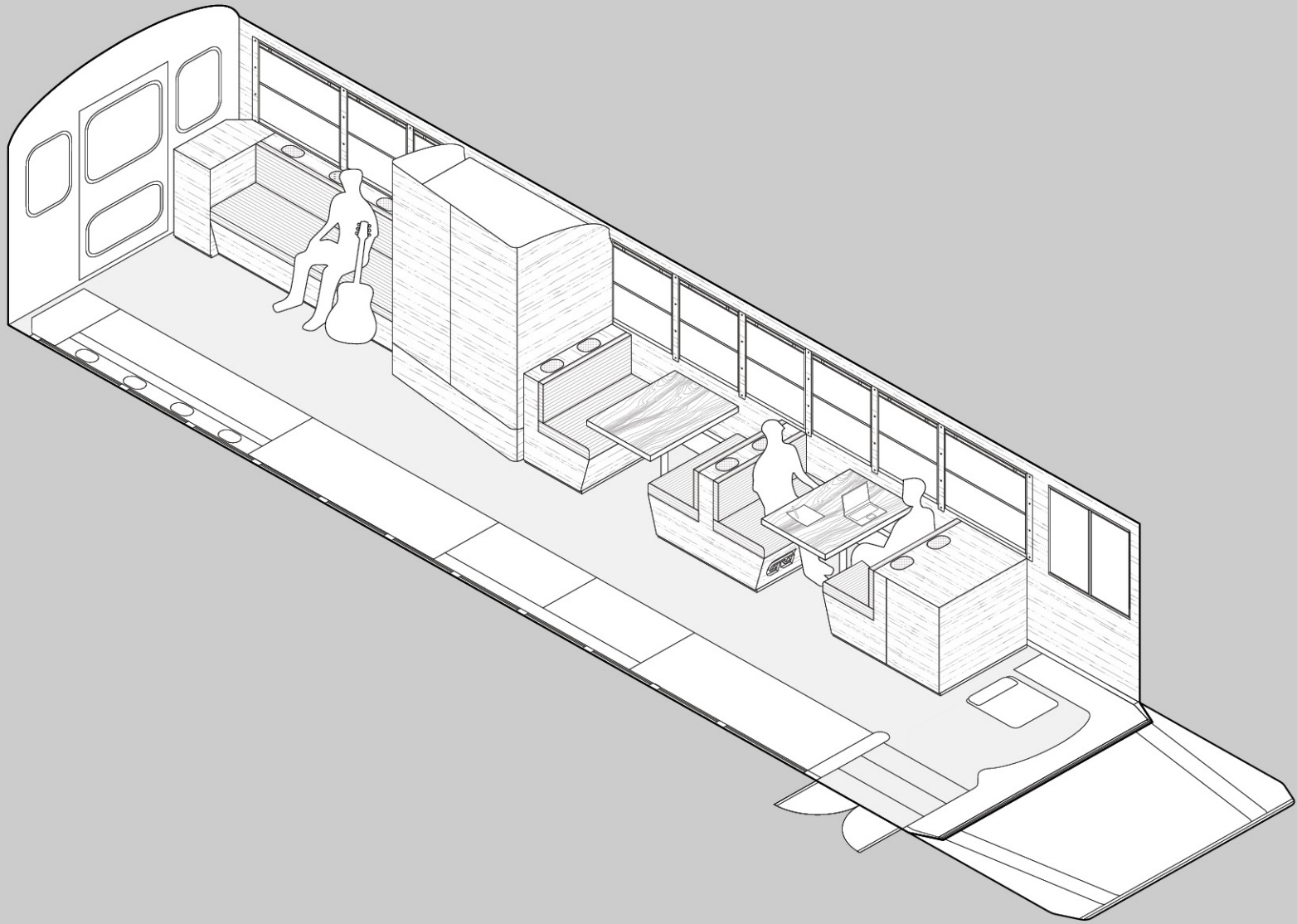
yang pmsu
LENKING and
RE CAR

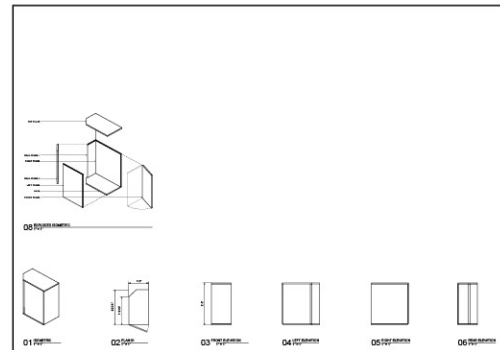
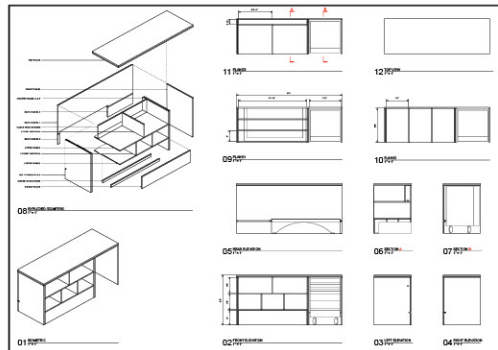
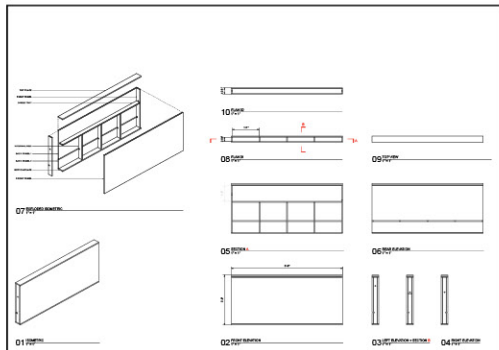
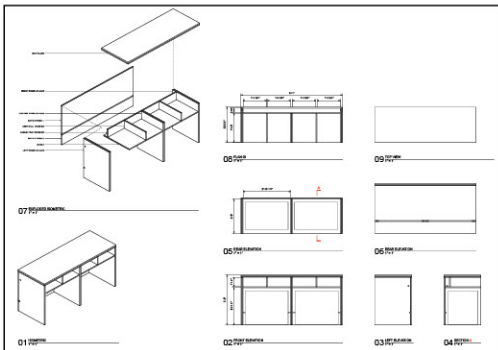
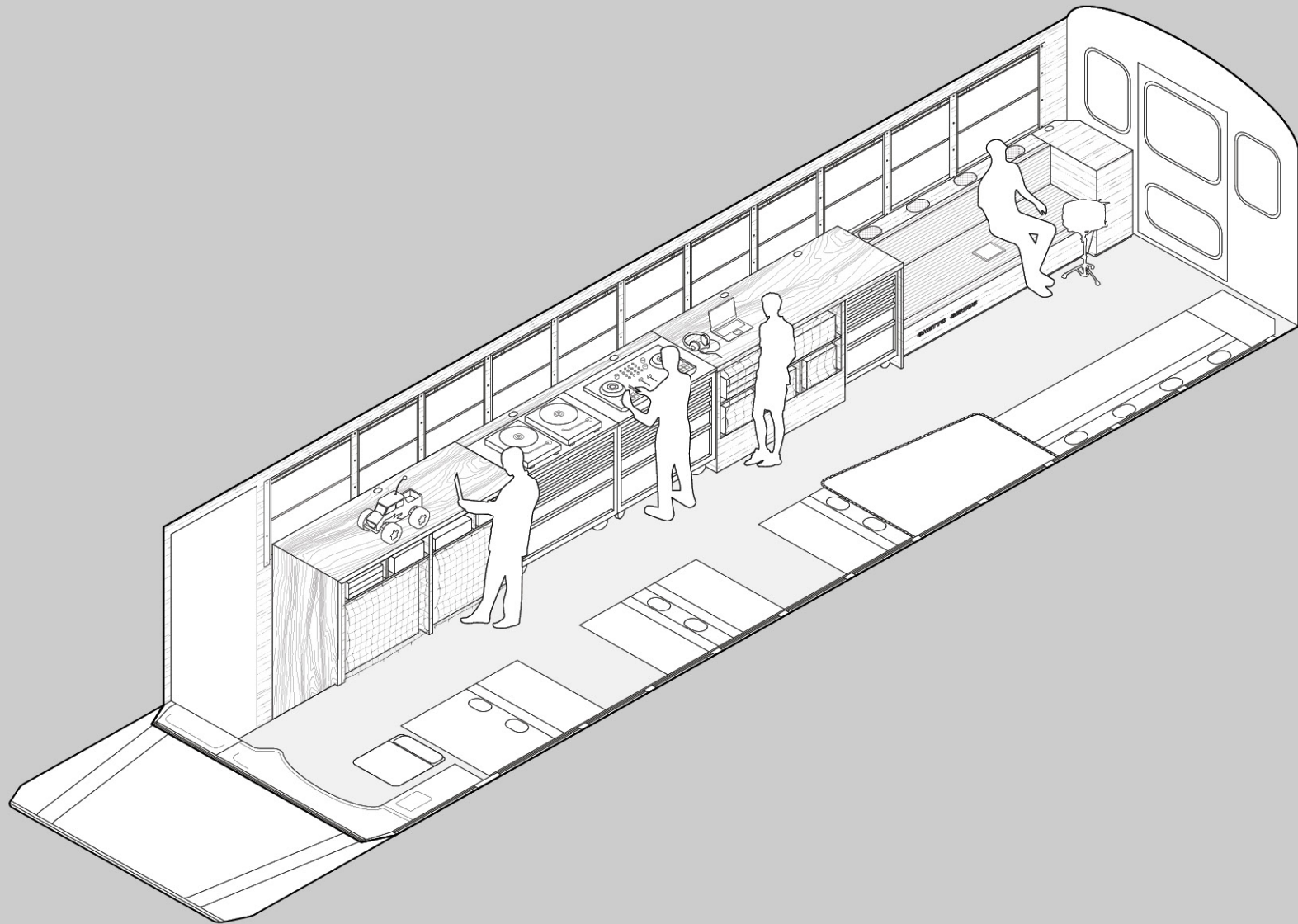
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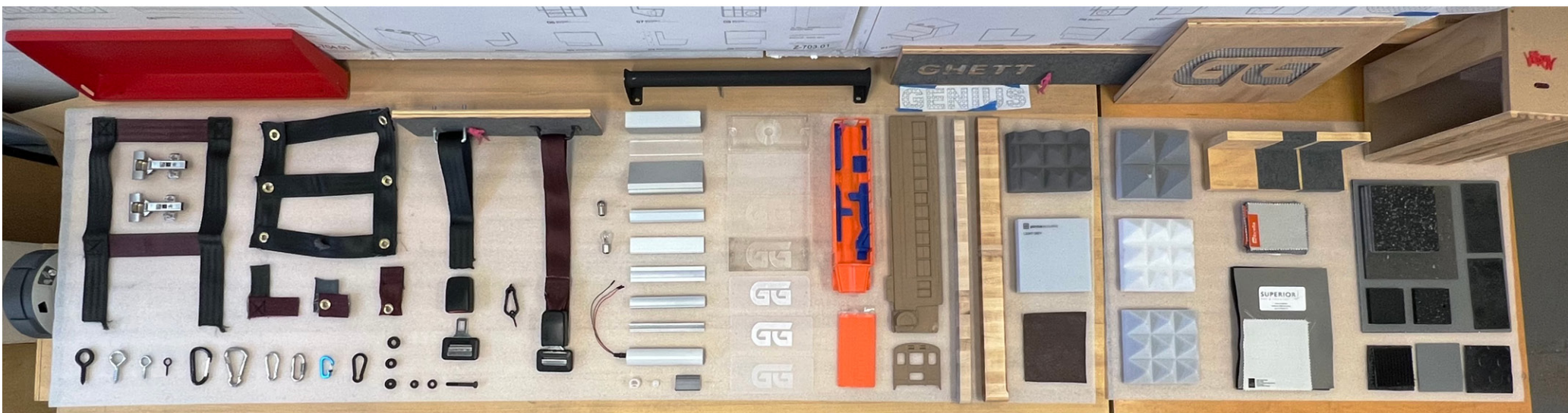
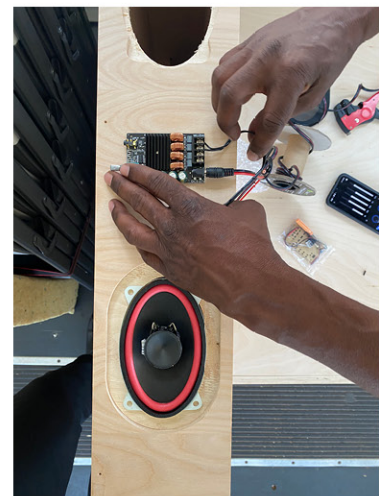
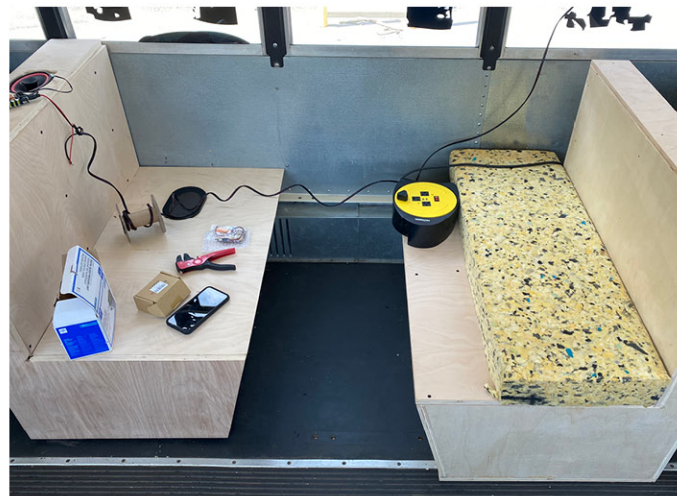
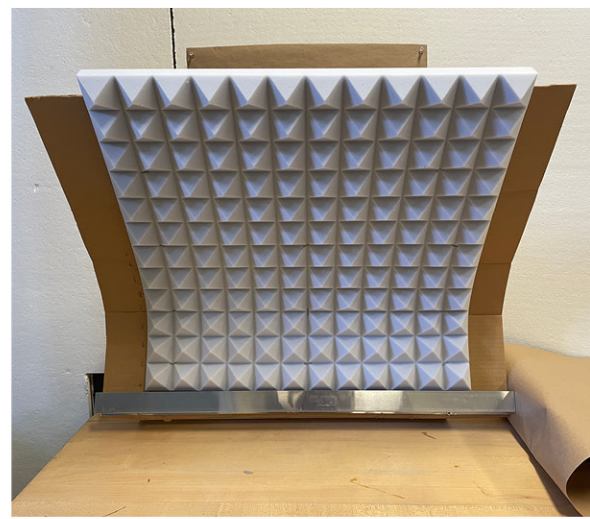
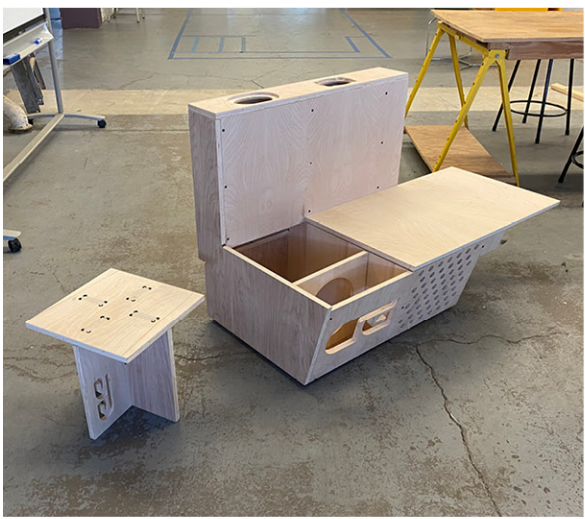
DELTA pmsu

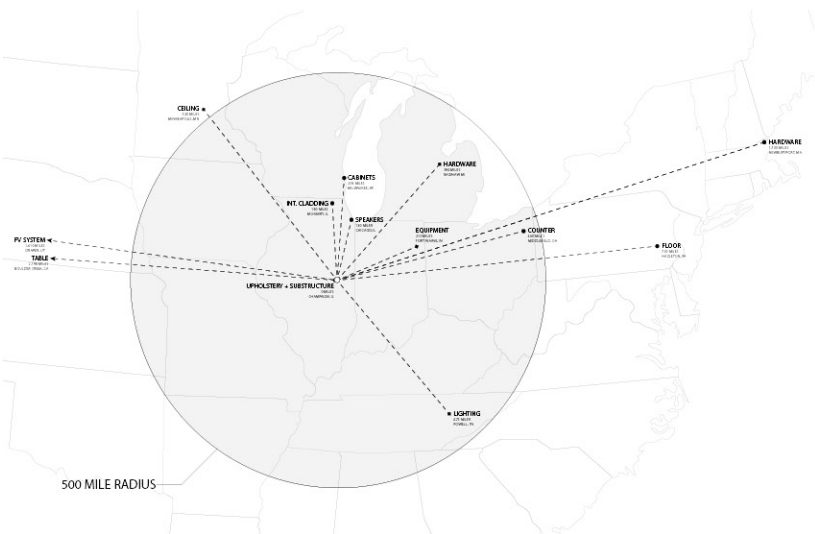
GG LOGO

LED strip





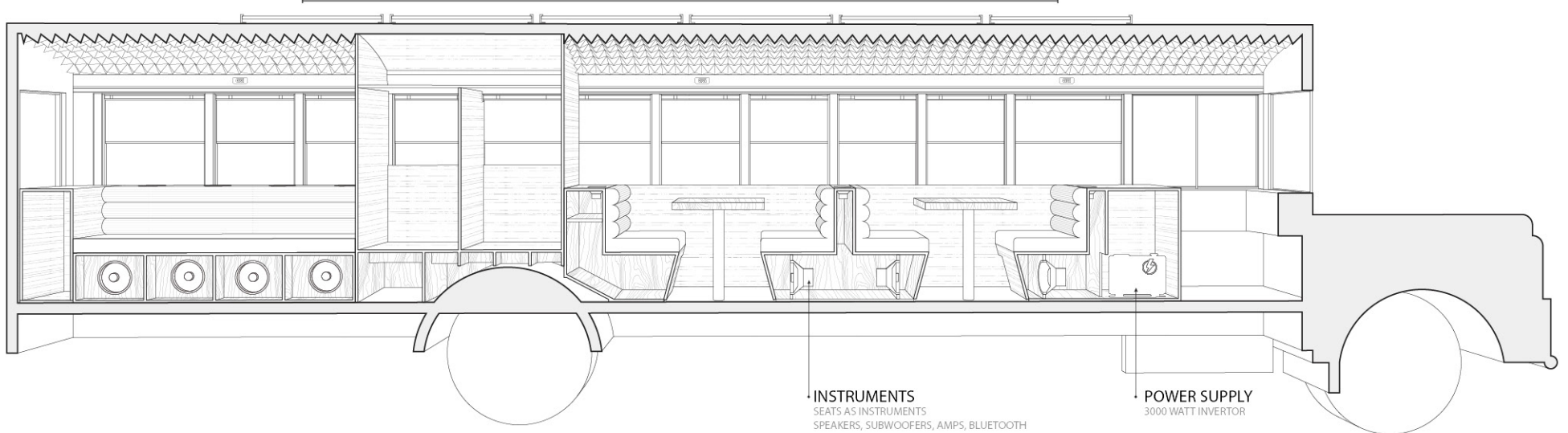




RESEARCH

Ten furniture pieces were developed with multiple functions: seating, storage, power supply, sound production, lighting, acoustic dampening, transportation safety, and overall durability considerations for a moving vehicle. The majority of materials were sourced within a 500-miles radius. Items removed during demolition were recycled, reused or will be incorporated into a future design-build project.

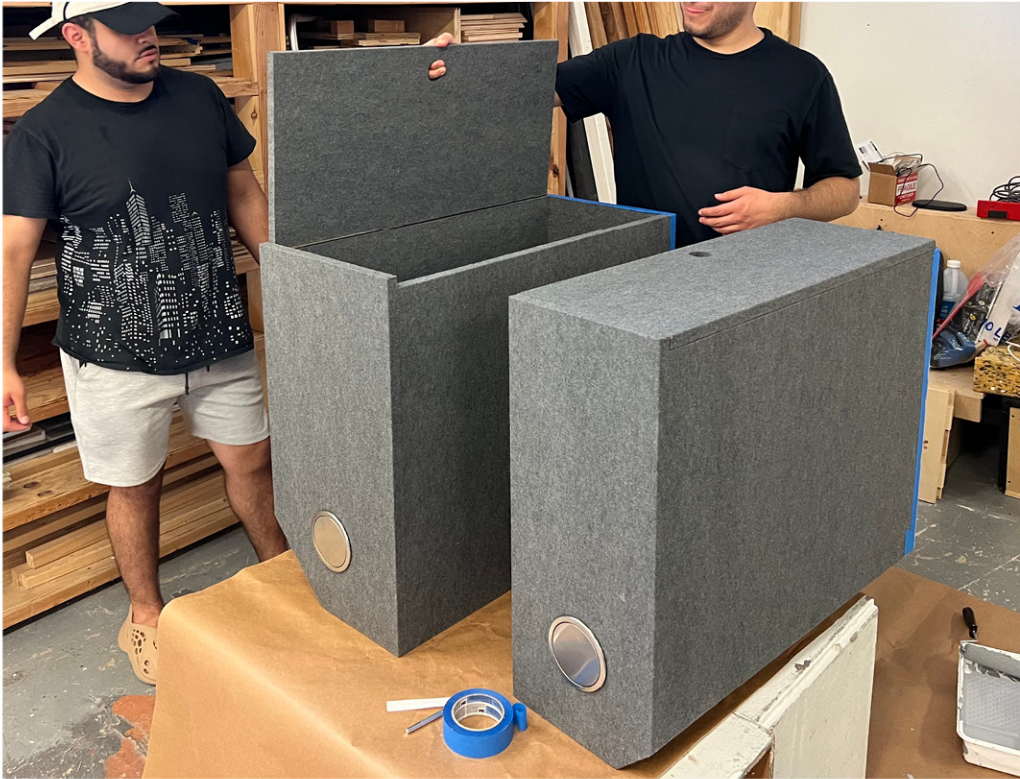
POWER
6 - 100 WATT SOLAR PANELS



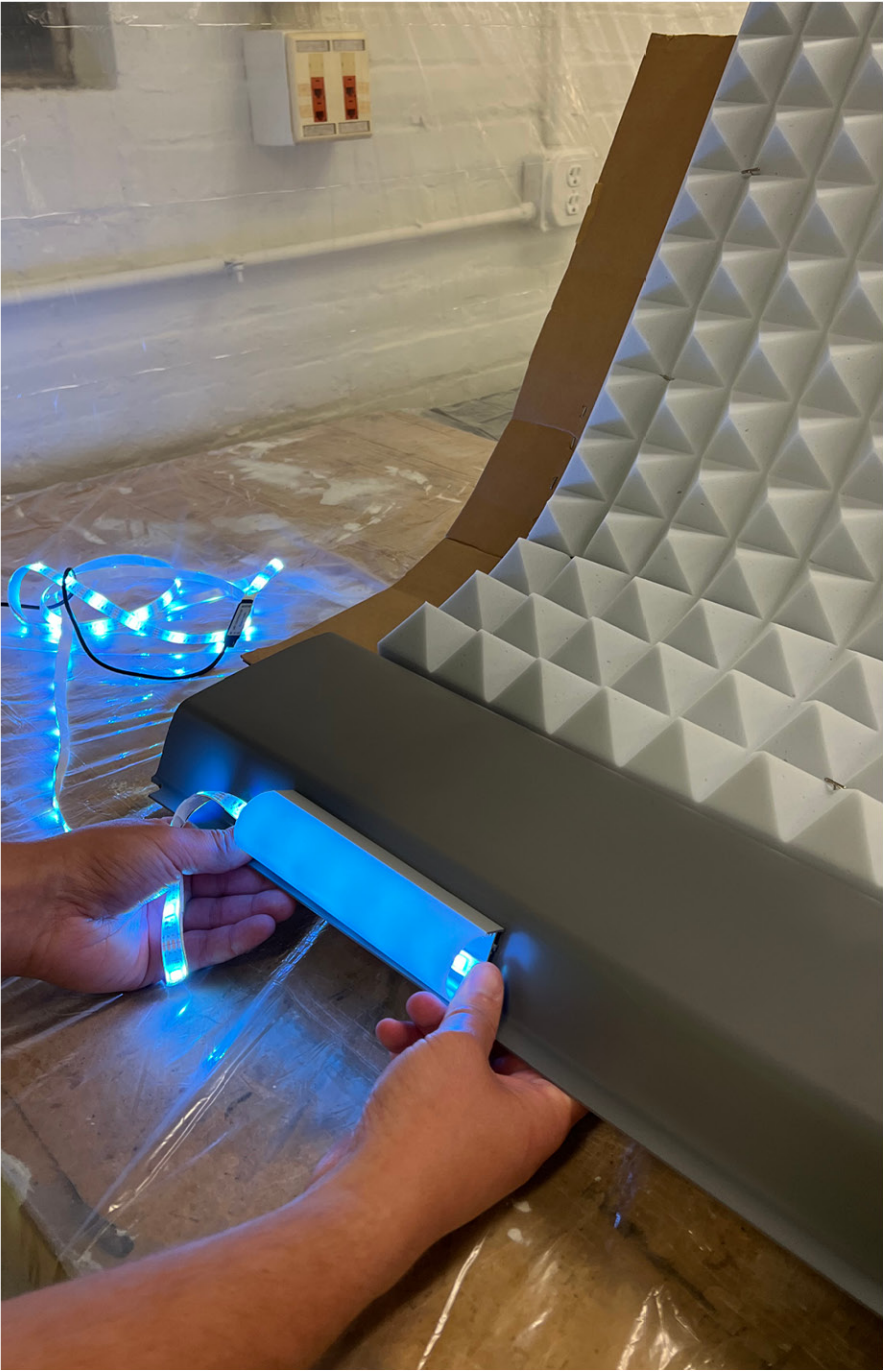
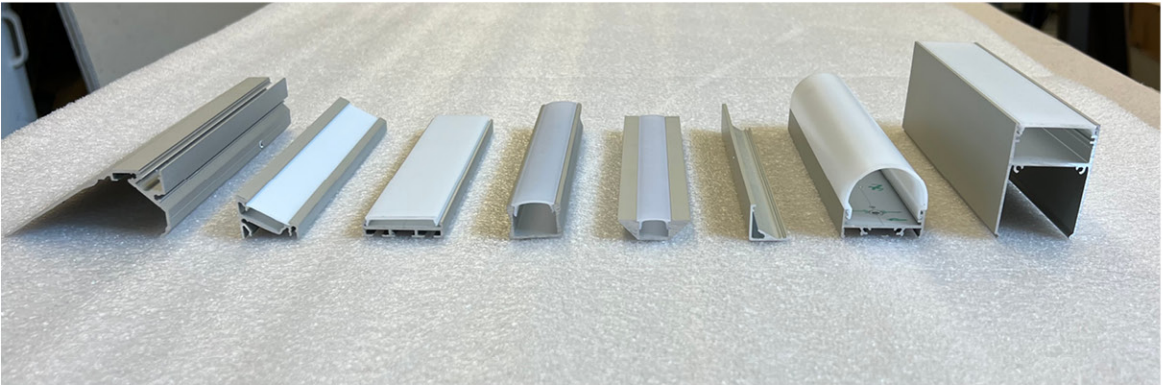
INSTRUMENTS
SEATS AS INSTRUMENTS
SPEAKERS, SUBWOOFERS, AMPS, BLUETOOTH

POWER SUPPLY
3000 WATT INVERTOR

FABRICATION + ASSEMBLY

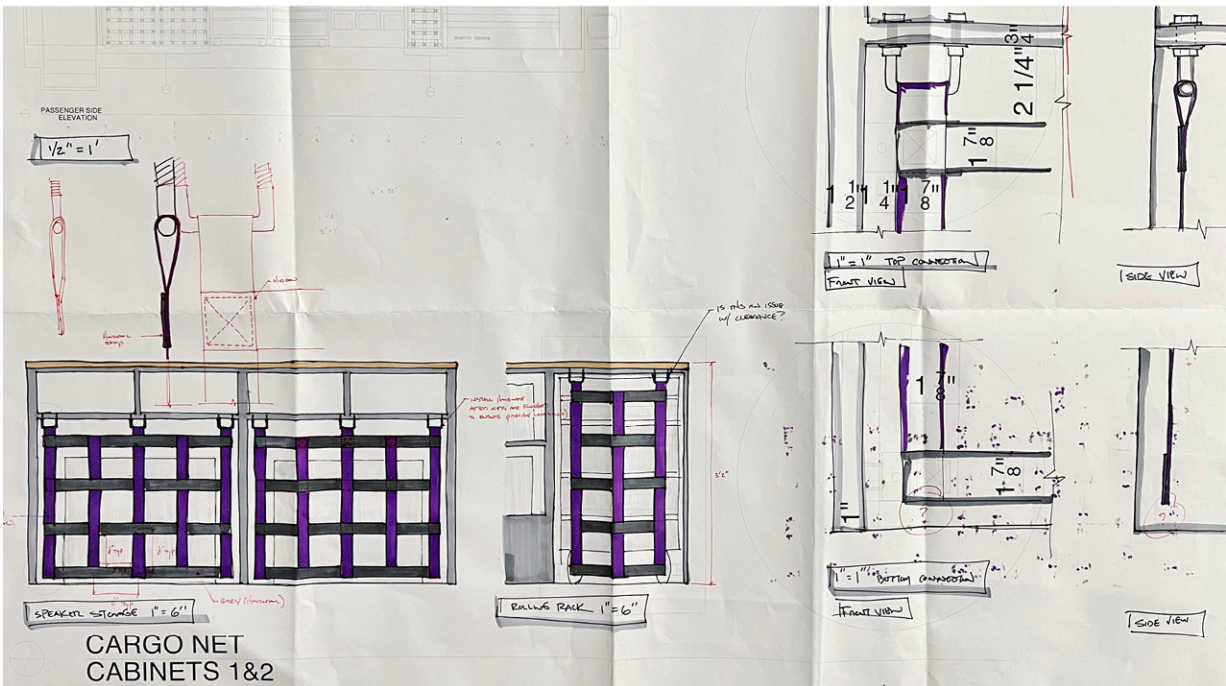
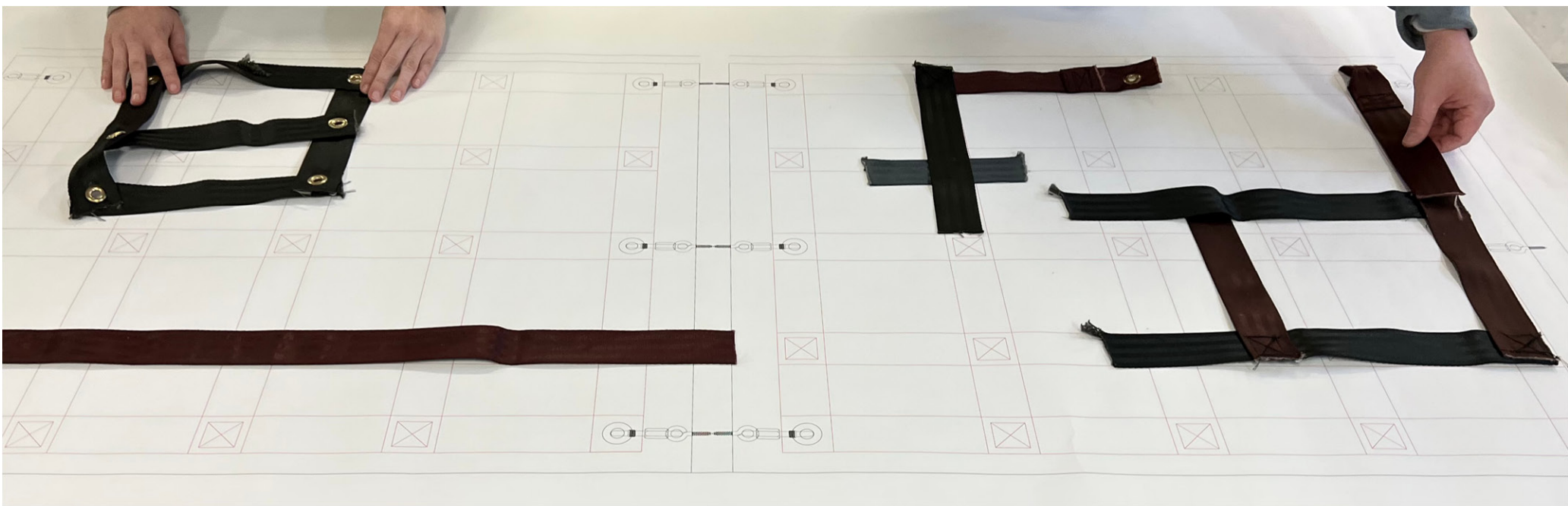


PROGRAMMABLE LIGHTING





INSTALLATION



MATERIAL REMIX

Project Initiation: January 2020

Individuals Engaged in Participatory Design Process: 174

Community Events During Development: 18

Individuals Engaged in Participatory Design Process: 174

Overall Community Engagement to Date: 5,000 +

Substantial Completion: May 2023

Role of Nominee: PI/Faculty Member + Student Supervisor

Collaborators: Community Leaders, Local Boy & Girls Club

Gross Floor Area: 233 sf

Gross Volume: 1,395 cubic feet

Width: 7'10"

Length: 36' (overall) 31'10" (interior)

Height: 6'6" (tallest) 5'6" (shortest) 6' (average)

Proportion of Reused Materials: Seat belts, Hardware – 7%

Recycled Steel Seat Frames: 840 lbs

Recycled Vinyl Seat Covers: 605 sf

Recycled Foam Seat Cushions: 82 cubic ft

Responsible or Certified Materials: Floor, Ceiling, Fabric Cladding

Funding Sources

University Presidential Initiative & Student Sustainability Grant(s)

Student Compensation

60 Students in a 3-credit hour seminar (1 semester)
Research Assistant w/ tuition waiver + monthly stipend (3 semesters)
Hourly Student Employees

Total Cost

Bus + Maintenance – \$	16,315
Exterior Vinyl Wrap – \$	19,475
Materials – \$	26,180
PV System – \$	6,700
Music Equipment – \$	9,000
Student Labor – \$	45,200
Faculty Stipend – \$	10,000
Total	\$132,870

***Unpaid Student Labor Prohibited**

1,872 hours :Student Labor

900 hours :Faculty Labor

\$1,376 :Food for Students

