

POWDERHOUSE  STUDIOS
FACILITIES, STAFFING,
SCHEDULE, POLICIES

PREFACE

This presentation was prepared for the Somerville School Committee regarding Powderhouse Studios, regarding the proposed logistics of Powderhouse's staffing, schedule, and operational policies.

It is one of a series of presentations which may be found online, in addition to information from Somerville Public Schools, at
<https://powderhouse.org/authorization>

Any questions or concerns should be directed to leadership@powderhouse.org.



01 FACILITIES

UNITING LEARNING WITH LIVING AND WORKING

Powderhouse Studios will be located at the mixed use redevelopment of what used to be the Powder House Community School, located at 1060 Broadway. Alongside Powderhouse, a mixture of affordable, open, artist live/work, and senior units are planned, in addition to a restaurant, bodega, community function hall and makerspace, and City park.

Powderhouse Studios joined the re-development at the invitation of the Collaborative Living Project (CLP), a group of seniors seeking to establish an aging-in-place community who found Sebastian Mariscal Studio (SMS), a design build firm located in Cambridge, to propose a redevelopment of the site. CLP's members had heard about Powderhouse Studios' development and reached out because of their excitement about the opportunities for mentorship, community, and integration with the public schools. This outreach has turned into a very exciting collaboration between CLP, Powderhouse Studios, and SMS to develop a unique, integrated community. SMS has worked hard to design and redesign around Powderhouse's needs, in addition to the many opportunities Powderhouse's own curricular focus on computation, narrative, and design offer the development.



GREAT SPACES RHYME

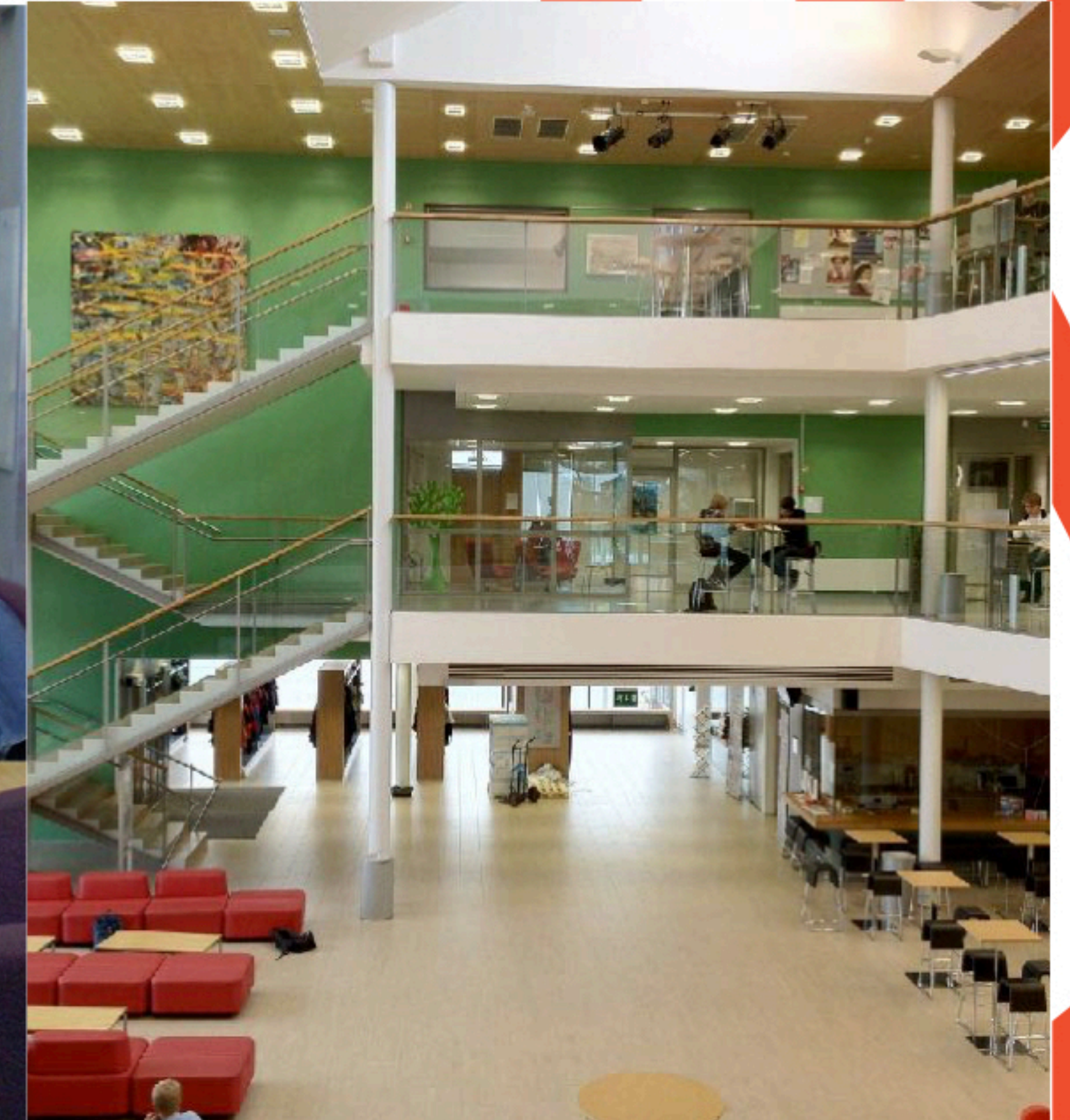
Just as other elements of Powderhouse's model reflect a combination of principles from great workplaces and great schools, so too will Powderhouse's campus.

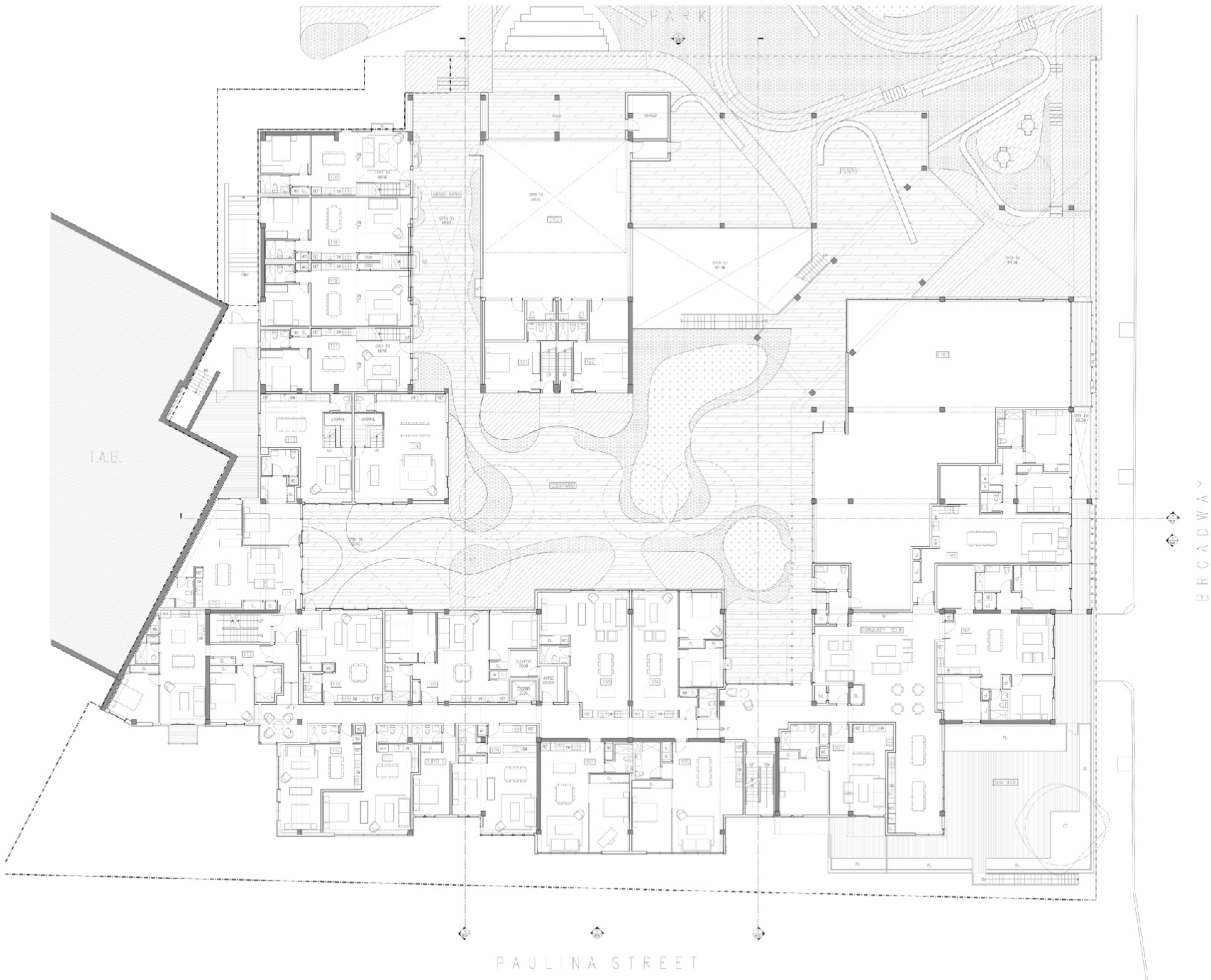
In particular, space is laid out to support small group work, project work and prototyping, and Powderhouse's small cohort model, all while prioritizing flexibility and open space.

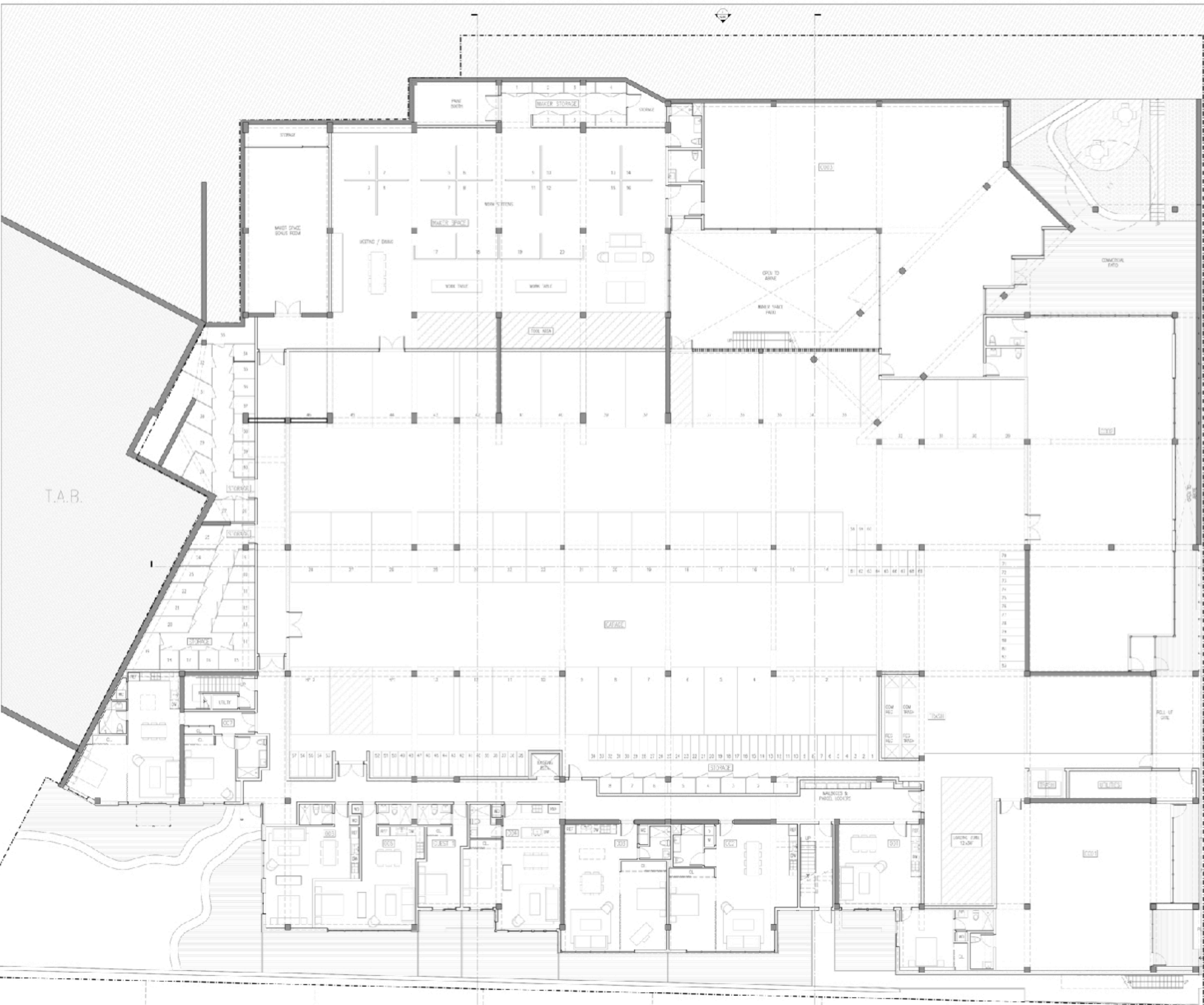
After visiting and consulting with many educational organizations, schools, and architects, a common theme emerged: the need to support design and redesign as novel models evolve.

Powderhouse's model embraces the design and redesign of its space as an opportunity to involve youth and staff in real projects. The design, fabrication, documentation, reflection, and redesign of cohort space will drive a curricular strand at Powderhouse, kickstarted by Powderhouse's outside fundraising.

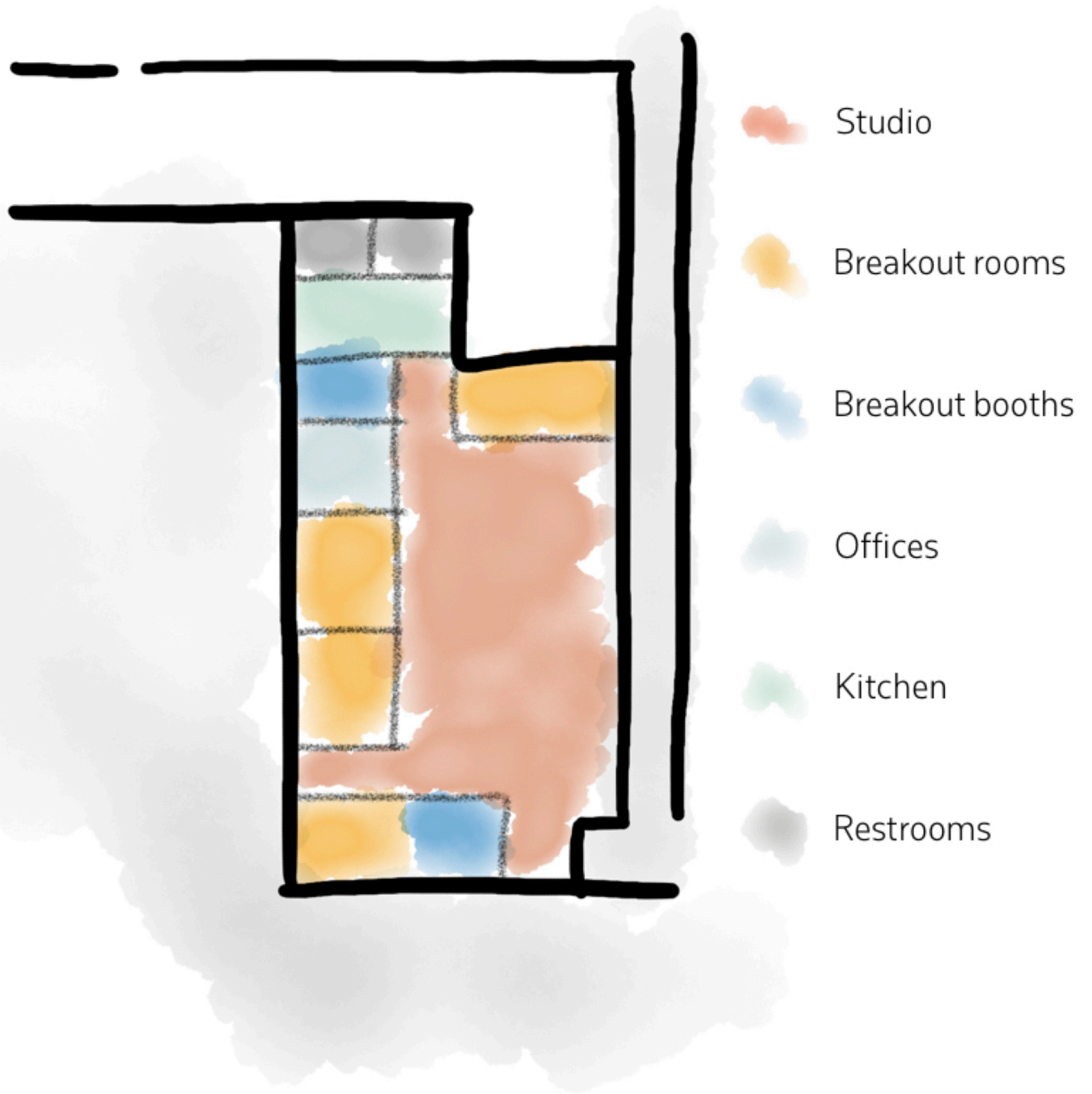
Powderhouse is currently working with StudioMLA, Supernormal, and the Massachusetts School Building Authority to design and develop these workshops and the design overall.













02 STAFFING

START OVERSTAFFED

To get it right, Powderhouse Studios is going to open overstaffed. This will allow Powderhouse to do four things especially well.

Develop Powderhouse's model and work out inevitable kinks — No matter how much planning goes into a school, not everything can be anticipated, and the design will evolve. It is important to have the staff capacity to support this.

Support and offset Central Office burdens — Creating a new school as different as Powderhouse represents a significant lift for Central Office. Outside fundraising will be committed to the additional capacity needed to reduce Central Office staffing demands.

Develop, document, and establish bridges to the rest of Somerville Public Schools — Powderhouse aims to be a resource district-wide. Doing this through professional and curriculum development requires significant time and coordination.

Ensure staffing plans remain responsive to the changing needs of the Powderhouse community — The youth at every school are different, and staffing plans will need to reflect that (especially as they regard SPED, ELL, and social/emotional support).

Staff → youth
ratio

10 → 40
(1:4)

14 → 80
(~1:5)

20 → 120
(1:6)

24 → 160
(~1:7)

Role	Year 1	Year 2	Year 3*	Year 4*
Program designer	1	2	3	4
Project manager	1	2	3	4
Youth advocate	1	2	3	4
Narrative	1	1	2	2
Computation	1	1	2	2
Inclusion (SPED)*	1	1	1	1
Cultural competency (ELL)*	1	1	1	1
Social work (CSW)*	1	1	2	2
Admin*	2	2	2	2
Subtotal	10	14	20	24

* Precise staffing will be subject to observed youth needs and enrollment patterns, identified in coordination with Central Office

STAFFING ROLES

Faculty

All staff design, develop, and support projects and programs, bringing their professional and creative backgrounds to bear while assuming a team role ensuring:

- **Program design** ...programs offer well-facilitated, rigorous, and divergent work.
- **Youth advocacy** ...the team is managing all non-cognitive con-siderations.
- **Project manager** ...projects are well-scoped, documented, and managed to a schedule and budget effectively.

Specialists

- **Computation, Narrative** ...computational, narrative depth of staff, youth, & projects.
- **Inclusion, Cultural Competency** ...services, systems design, professional & curriculum development supporting access across learning and language differences.
- **Socioemotional** ...Offer services, systems design, professional and curriculum development supporting social and emotional health and learning.

Leadership

Staff will be managed by a leadership team including licensed and experienced principals/operators.



Computation specialist

Narrative specialist

SPED specialist

ELL specialist

For every staff member

→ DLCS credentials

Experience doing creative projects of their own and facilitating project-based environments

For all of Powderhouse

→ SPED, ELL credentials

→ Mathematics, ELA credentials

Powderhouse staff are organized in small, interdisciplinary teams working with the same cohort over many years, all supported by district staff.

STAFFING PLAN

Starting something new requires more support and flexibility. Powderhouse's staffing flexibility will be used to ensure that all the necessary support is in place to ensure youth's and the model's success minimize Central Office burdens.

For this staffing plan to be effective, staff must have the appropriate background, perspective, and training. All staff will (through hiring or their on-boarding process) develop experience designing divergent, project-based experiences with youth.

Beyond this, every staff member will:
Successfully complete (a) Powderhouse's fellowship program, (b) an approved Digital Literacy and Computer Science Educator Preparation program, (c) MTELs for Communications and Literacy Skills, (d) MTEL for Mathematics or English, (e) their RETELL/SEI endorsement, and (f) secure "faculty status," a peer-evaluation endorsement driven by their work at Powderhouse.

There will also be an appropriate number of qualified staff to support the Special Education, English Language Learning, and counseling/social work needs of the enrolled youth.

Staff → youth ratio	10 → 40 (1:4)	14 → 80 (~1:5)	20 → 120 (1:6)	24 → 160 (~1:7)
Role	Year 1	Year 2	Year 3*	Year 4*
Program designer	1	2	3	4
Project manager	1	2	3	4
Youth advocate	1	2	3	4
Narrative	1	1	2	2
Computation	1	1	2	2
Inclusion (SPED)*	1	1	1	1
Cultural competency (ELL)*	1	1	1	1
Social work (CSW)*	1	1	2	2
Admin*	2	2	2	2
Subtotal	10	14	20	24

* Precise staffing will be subject to observed youth needs and enrollment patterns, identified in coordination with Central Office



03 SCHEDULE

GRADUAL RELEASE MODEL

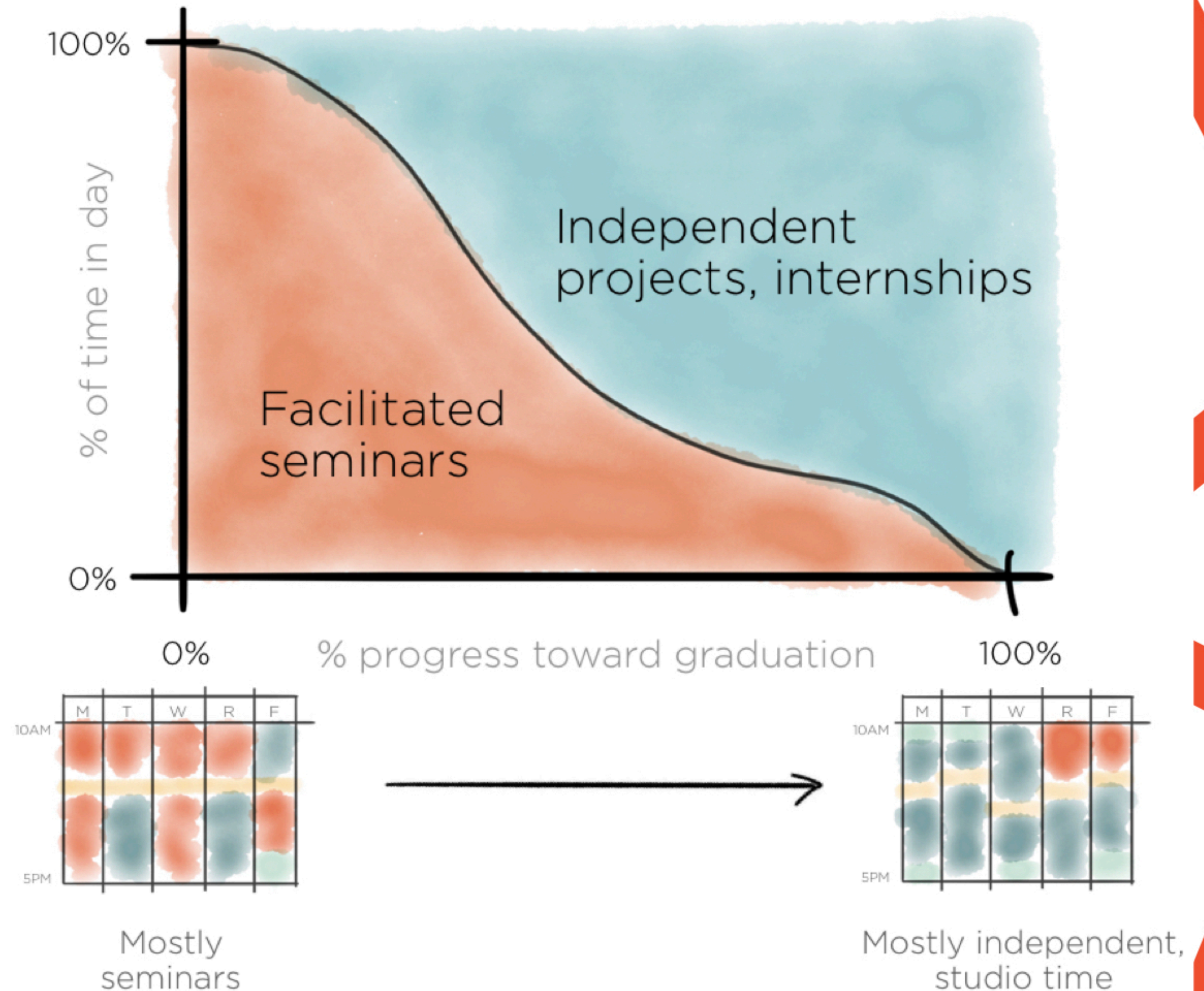
At its core, Powderhouse Studios is about supporting youth's essential transition to adulthood. Independence and self-management are core to making this transition successful.

Many of Powderhouse's design elements reflect the logic of a gradual release model, scaffolding youth's work to grow both in the independence required of youth and the timescale of that independence.

By the time youth graduate, they are expected to have gone through the entire project cycle on a 1,000-hour timescale.

But youth need to build up to that timescale. Programs, seminars, and the cohort structure are designed to allow staff to meet youth where they are, providing structure at whatever timescale youth can effectively work.

Just as coverage of standards is one element of an Individualized Learning Plan to which staff manage, so is the growth of timescale on which youth work independently. This progression means that the daily, weekly, monthly schedule shifts over time under careful guidance and management by staff.

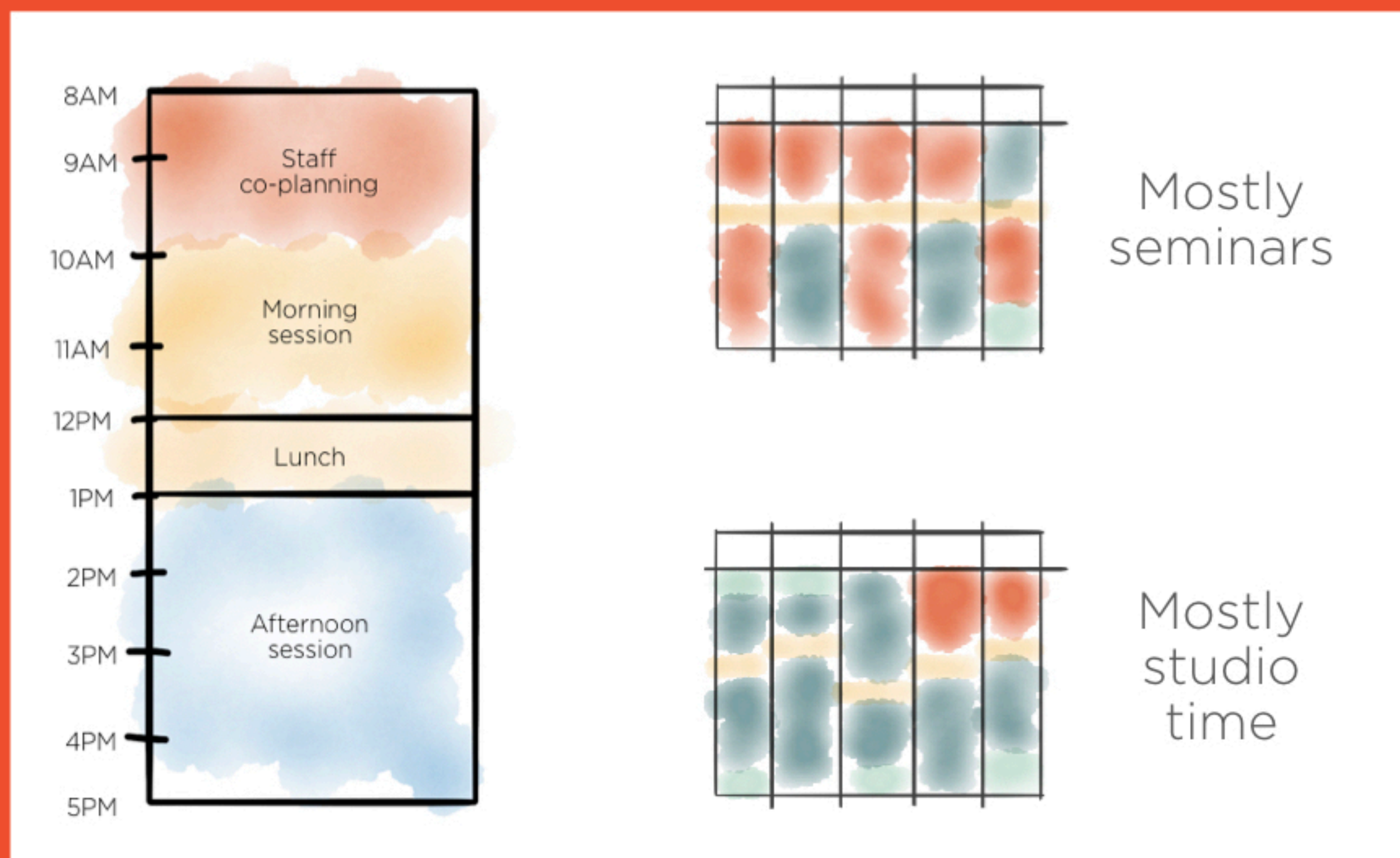


INDIVIDUALIZED PROJECTS → FLEXIBLE, CONTIGUOUS TIME

Projects are hard. That's part of why Powderhouse Studios is built around them. You never know exactly how they'll go or what they need to succeed. This means persisting through failure, adjusting scope as you iterate, and dealing with problems and questions you never anticipated. This requires large blocks of contiguous, flexibly scheduled time.

Similarly, individualization is hard. It requires time for mentorship, for work with youth to uncover and cultivate interests, for tailored mentoring around individual needs. These needs cannot always be predicted or scheduled, meaning that Powderhouse's individualization also requires large blocks of contiguous, flexibly scheduled time.

Taken together, this means that Powderhouse will be open year-round, and in coordination with families and cohort teams, youth's schedules will be designed to meet family's needs while supporting the gradual release model required to scaffold youth's transition to increasing independence, self-efficacy, and self-management as they progress toward graduation.



GRADUAL RELEASE IN A PROGRAM

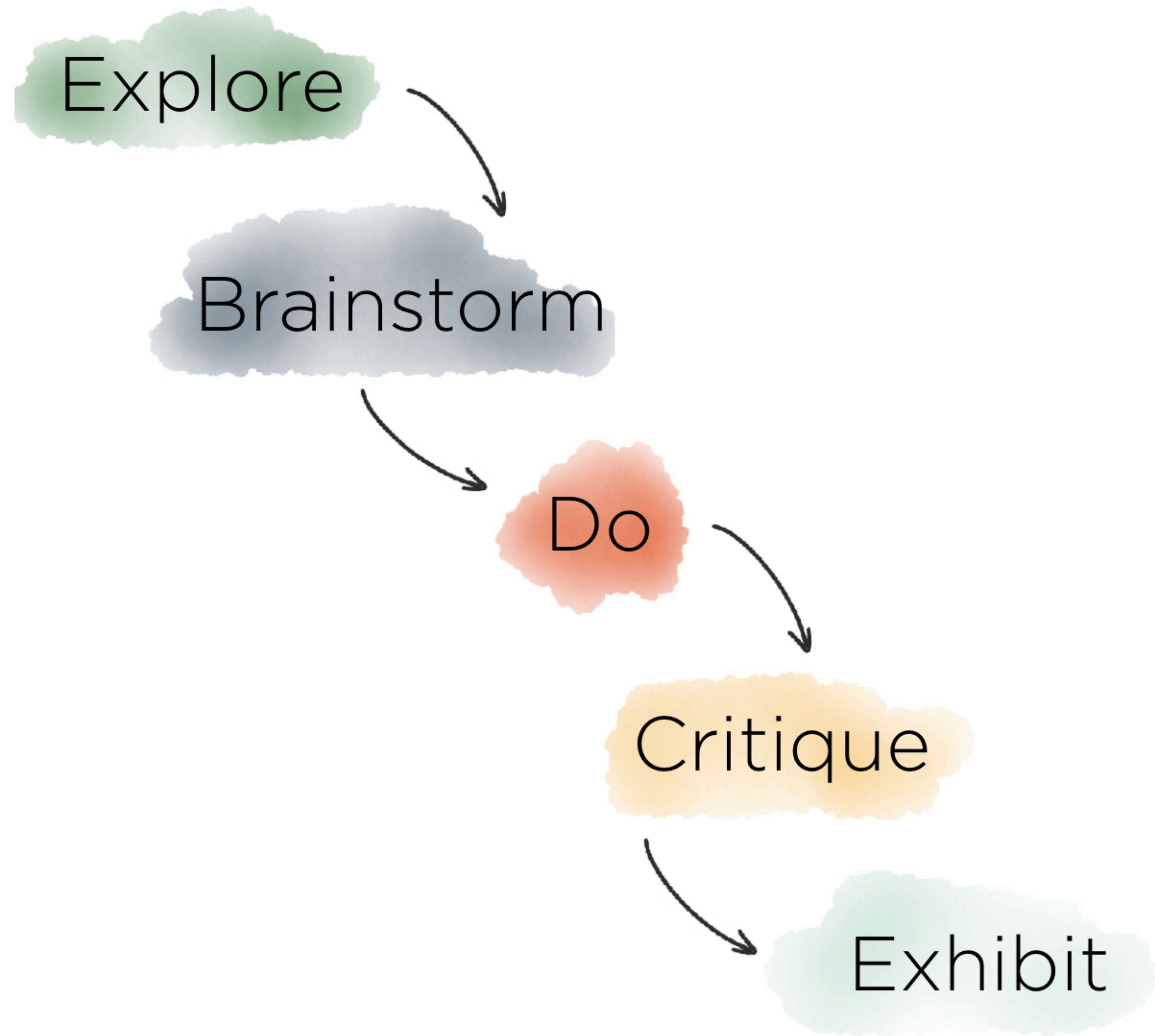
Gradual release doesn't just appear in Powderhouse's annual schedule and calendar. It also appears within the design of its programs.

In previous presentations and shared materials, Powderhouse has demonstrated how programs during the pilot with the 7th and 8th grade team at the Healey School reflect some of the principles behind and workflows for gradual release.

Though designed for a more constrained schedule, the broad principles and design in much of Powderhouse's Healey programming reflect the approach which will be used in the design of Powderhouse's programming.

Specifically, many programs will scaffold a gradual increase in the timescale of independence asked of youth:

- **Exposing** — Highly facilitated discussions and activities introducing youth to the tools and ideas of the program's theme.
- **Brainstorming** — Facilitated brainstorming to identify and scope possible projects.
- **Doing** — Iterative, reflective studio time actually doing the projects.
- **Exhibiting** — Facilitated analysis, documentation, and exhibition of work.



WEEKLY SCHEDULES

Because Powderhouse focuses on a transition to increasingly large scale, independently managed projects, youth's schedules shift over time as well.

Each day is broken out into morning, lunch, and afternoon blocks. When youth first join Powderhouse, those blocks are carefully facilitated to combine programs, workshops, and studio time.

Over time, more and more of youth's time is dedicated to studio time pursuing their own projects. As the scale of projects grow, depending on youth's interests, some of these projects may grow in scope to become something more like internships, co-ops, or service learning work.

The projects youth work on are developed, scoped, and managed by staff to ensure coverage of Individualized Learning Plan goals. This allows different youth to pursue not just different projects, but different scales of project in a developmentally appropriate and individualized way.

	M	T	W	R	F
8-9A	Co-planning				
9-10A	Breakfast				
10-11A	Signs of Life — kinetic sculpture & cybernetics	Signs of Life — kinetic sculpture & cybernetics	Computatio n seminar	Studio time	Studio time
11A-12P					
12-1P					
1-2P	Lunch	Lunch	Lunch	Lunch	Lunch
2-3P	Invisible Forces — multimedia storytelling	Invisible Forces — multimedia storytelling	Narrative seminar	Athletics	Document, critique, and plan projects
3-4P					
4-5P					

WEEKLY SCHEDULES

Because Powderhouse focuses on a transition to increasingly large-scale, independently managed projects, youth's schedules shift over time as well.

Each day is broken out into morning, lunch, and afternoon blocks. When youth first join Powderhouse, those blocks are carefully facilitated to combine programs, workshops, and studio time.

Over time, more and more of youth's time is dedicated to studio time pursuing their own projects. As the scale of projects grow, depending on youth's interests, some of these projects may grow in scope to become something more like internships, co-ops, or service learning work.

The projects youth work on are developed, scoped, and managed by staff to ensure coverage of Individualized Learning Plan goals. This allows different youth to pursue not just different projects, but different scales of project in a developmentally appropriate and individualized way.

	M	T	W	R	F
8-9A	Co-planning				
9-10A	Breakfast				
10-11A	Targeted academic support	Signs of Life — kinetic sculpture & cybernetics	Studio time	Signs of Life — kinetic sculpture & cybernetics	Studio time
11A-12P					
12-1P					Lunch with community expert
1-2P	Lunch	Lunch	Lunch	Lunch	
2-3P	Athletics	Studio time	Studio time, with targeted academic support	Studio time	Document, critique, and plan projects
3-4P					
4-5P					

SCHEDULE, CALENDAR

Annually

Powderhouse Studios will be open 230–244 days each year, depending on the particular holidays and facilities maintenance schedule in a given year.

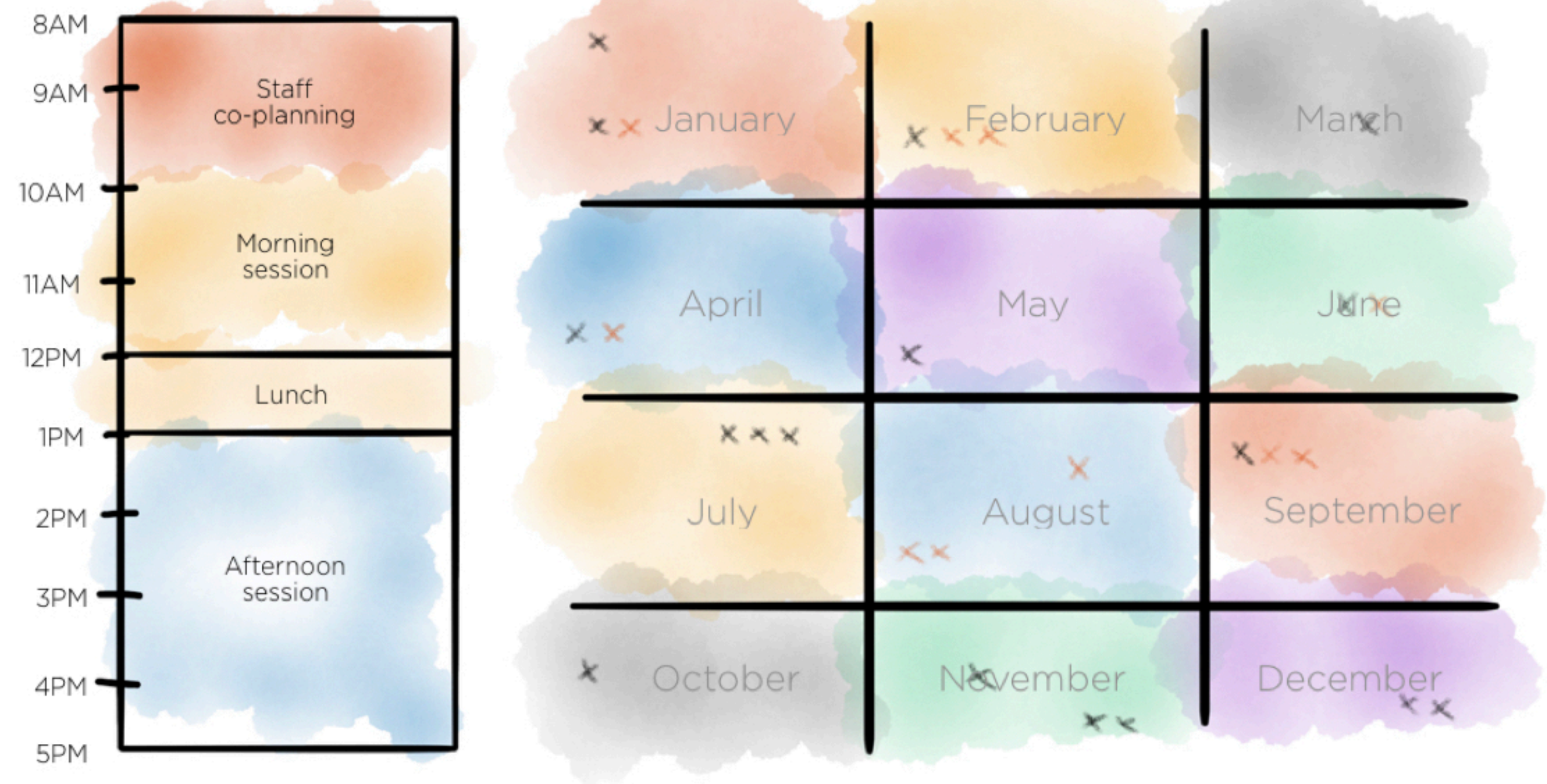
This schedule will be determined annually in coordination with the District, and communicated to families and the School Committee on the same timeline as other district schools.

This will allow for families to schedule vacations to match their needs (and/or to, e.g., match traditional academic calendars of youth's siblings).

Daily

Staff's days will run 8AM–5PM, 220 days each year, with staff vacation schedules staggered to ensure coverage. This staggering will be designed by each cohort's team in coordination with Powderhouse leadership.

Youth will attend 10AM–5PM on a schedule determined in coordination with their families, and breakfast programming available each day as well.



→ Open ~240 days each year, families coordinate with Powderhouse Studios staff to develop individualized calendars.

→ Open 8AM–5PM, with the day for youth running 10AM–5PM, with breakfast programming available.

→ Closed for state and federal holidays, in addition to up to ten maintenance days and some periods like Christmas, New Year's, Thanksgiving.

→ Schedule will be coordinated and communicated on the same timeline as the rest of the District.

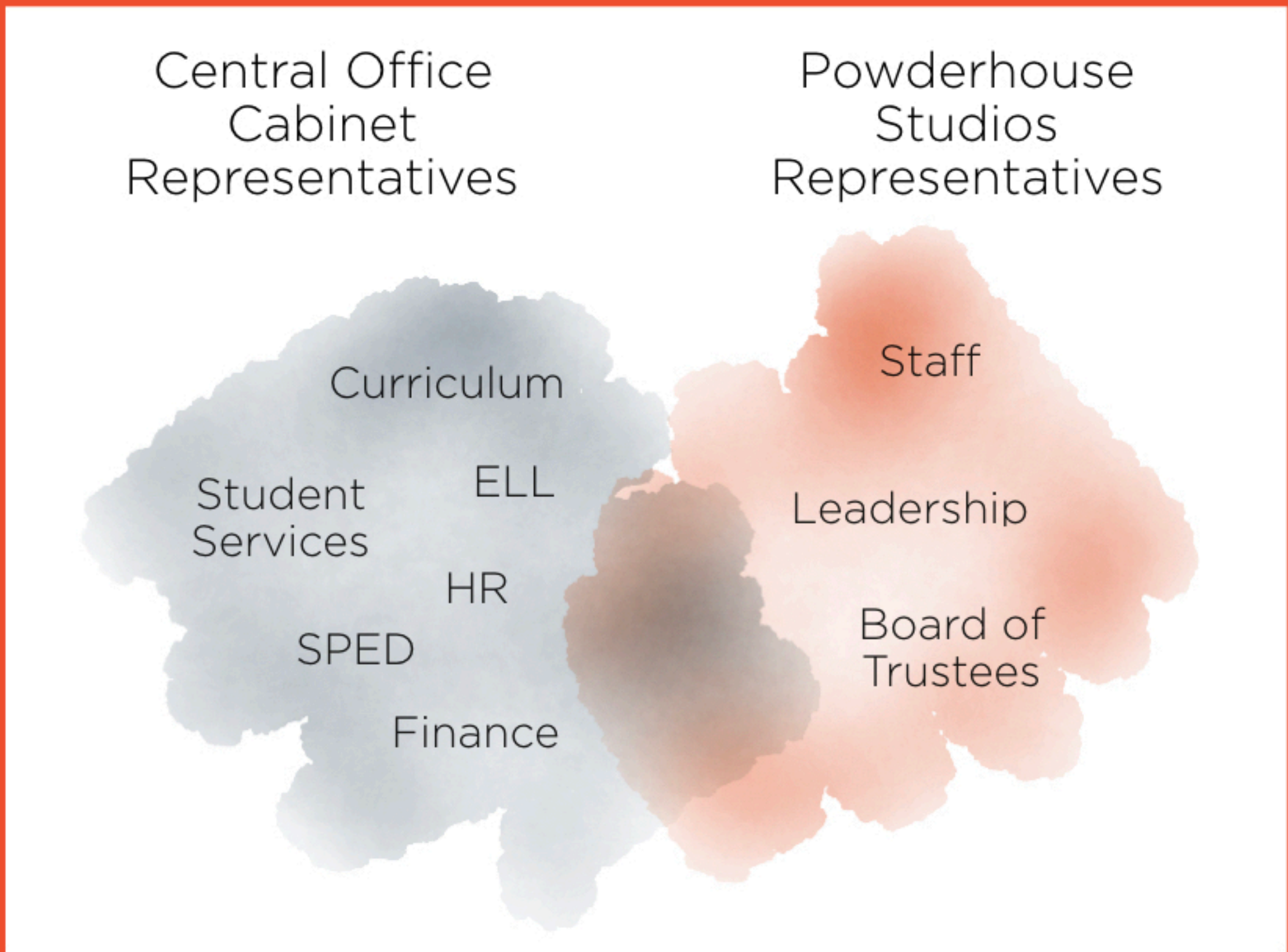


02 POLICIES

HOW ARE POLICIES DEVELOPED?

Schools are complex. When developing a new model, those complexities compound, often needing new policies to govern everything from attendance tracking to transcripts. Many areas for policy development have been identified by the District and Innovation Plan Committee, and some are outlined in the Innovation Plan. To fully develop and integrate policies with District practice requires significant effort. The District Integration Working Group will comprise District and Powderhouse personnel—supported by outside experts as appropriate—and will be responsible for operationalizing Powderhouse’s design on the District side of things over the coming year.

DISTRICT INTEGRATION WORKING GROUP



A FEW EXAMPLES



Accessing space and equipment — Powderhouse’s model emphasizes community integration. Because of the role of the community workshop in Powderhouse’s campus (and the potential for outside providers to work with youth), just as FabVille at Somerville High School required policy development, so too will Powderhouse.



IT support for physical computing — Many of the projects at Powderhouse Studios will explore technical and creative infrastructure uncommon in schools. e.g. physical computing projects involving sensor networks require design and development of new network policies and infrastructure.



Financial transparency — Powderhouse is committed to full, financial transparency for its site-based budget. Just as Somerville’s Visual Budget Explorer or Socrata integration require work and policy development, making project and site-level budgeting transparent to the public will require similar work.

Find out more about
the Powderhouse Studios
proposal at

**[powderhouse.org/
authorization](https://powderhouse.org/authorization)**

The background consists of several overlapping, semi-transparent orange shapes on a white background. These shapes include large triangles and polygons of various sizes, creating a dynamic, layered geometric pattern. The central focus is a large orange polygon with rounded corners.

THANK YOU!