



Feasibility Analysis for a Makerspace in the Town of Erie

Town of Erie, Colorado
January 18, 2022



Ingenuity, Integrity, and Intelligence.

Agenda

- Who we are and why are we here
- What is a makerspace
- Engagement highlights
- Preliminary recommendations
- Next Steps





Mike Scholl

- Economic Development and Redevelopment specialist.
- Development recruitment and negotiations.
- Project financial modeling.



Jamie Leben

- Serial Entrepreneur and a Maker.
- Recognized expert in MakerSpaces
- Founded the Loveland CreatorSpace and has assisted numerous other makerspaces get started.



The End.

Why are we here?

- We have been hired by the Town of Erie to assist with the development of a Makerspace
- Specifically:
 - Feasibility of Schofield Farms site as a potential Makerspace
 - Assess the potential benefit to the Town
 - Assess the level of interest (the Makers!)
 - Make recommendations on organizational structure and business model
 - Complete a plan to move forward

What is a Makerspace

- Collaborative workspace
- A place for making, learning, exploring and sharing.
- The concept goes back to the mid-90s with the introduction of “hackerspaces” for computer programmers.
- Evolved into “makerspaces” that included tools and equipment, not just computers.
- Hacker = Negative Connotation



What is a Makerspace

- Coding
- 3d printing
- Laser cutting
- Soldering
- Electronics
- Robotics
- Wood working
- Car Clubs
- Inventing
- Crop production
- Brewing/Distilling
- Farrier/Horseshoeing
- Food production
- Metal fabrication
- Welders
- Sewing
- Pottery
- Other

Kickoff Meeting #1 August 9, 2021

- Advertised on Town's social media outlets.
- Included a tour of the Schofield Farm site.
- Called local businesses and interested stakeholders.
- Attended by over 30 stakeholders with a variety of background.
- Facebook group page was created with 131 members.

Engagement Highlights



**Erie Makerspace
Kick-off Meeting**

Wednesday, August 11th

Site Tour of Schofield Farms: 4:00 to 5:00 pm
2203 N 111th Street
followed by a
Planning Meeting at Erie Community Center: 5:30 to 7:00 pm
450 Powers Street

- Learn more about Makerspaces and why they can be a great community amenity
- Meet other Makers from the community and share ideas
- Engage with the Town and help us build a plan to bring a Makerspace to Erie



Engagement Highlights

Follow up meeting on September 29, 2021

- Attended by over 30 residents including Library, Aims and Community College
- Reviewed the preliminary recommendations and strategies.
- Meet up group started with social events planned.
- Discussed the building needs and other options.



Preliminary Recommendations

Two track
approach



#1

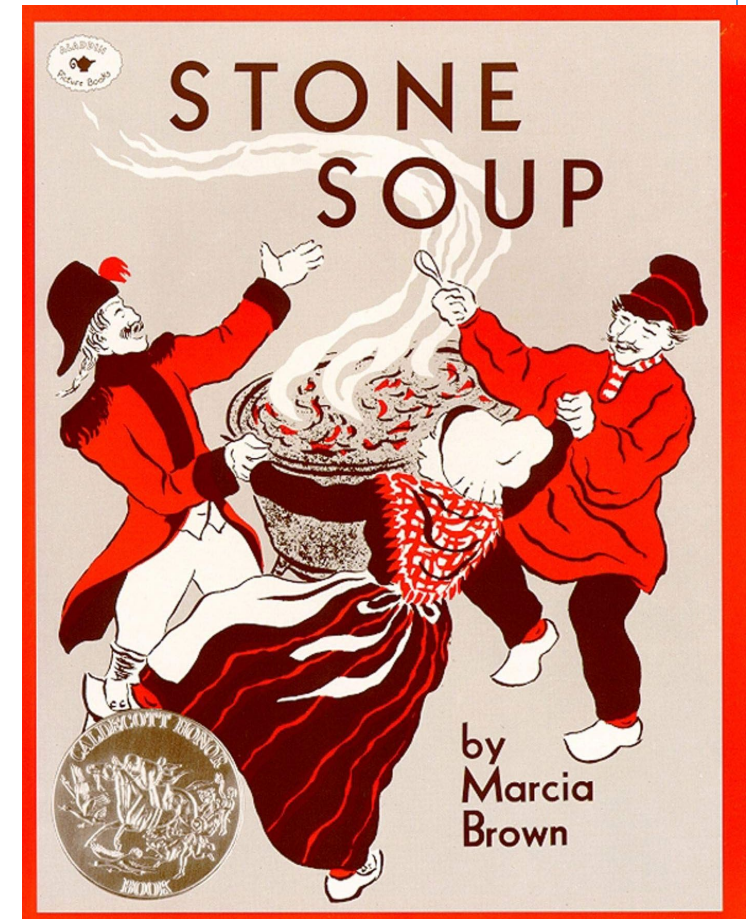
Organizational
Capacity

#2

Building
Feasibility

Track #1 – Organizational Capacity

- Successful Makerspaces are:
- Driven by community
- Based on a shared set of norms
- Unique to the community
- About giving before getting



#1

Identify a core leadership group and organize group events to help build the maker community in Erie.

- Encourage shared activities.
 - Show and share project potluck
 - Local company tours.
 - Basic “intro” classes, through the library.
- Build membership and build community.
- Identify fundraising opportunities.

Superpowers

“Doing”

“Communication and Marketing”

“Community Connection”

“Teaching and thinking big”

“Getting stuff done”

“Problem solving through failure”

“Creating”

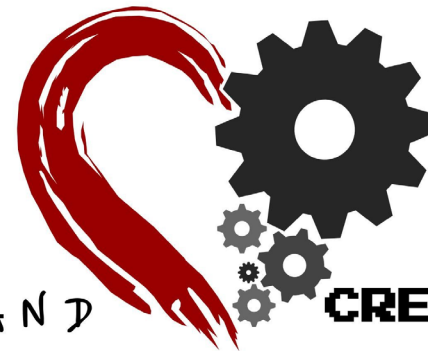
#2

Establish a non-profit corporation with a 501(c)3 status and form the entity.



The Gizmo Dojo

LEARN • CREATE • COLLABORATE



LOVELAND

CREATORSPACE

#3

Create the programming plan and identify the equipment needs and cost.

- Identify the MVP (“Minimum Viable Product”) for the Erie space.
- What is the minimum:
 - Tools
 - Space
 - Power
 - Educational programming
 - Location etc.
- What do the average early member/supporters need to begin financially supporting the space?



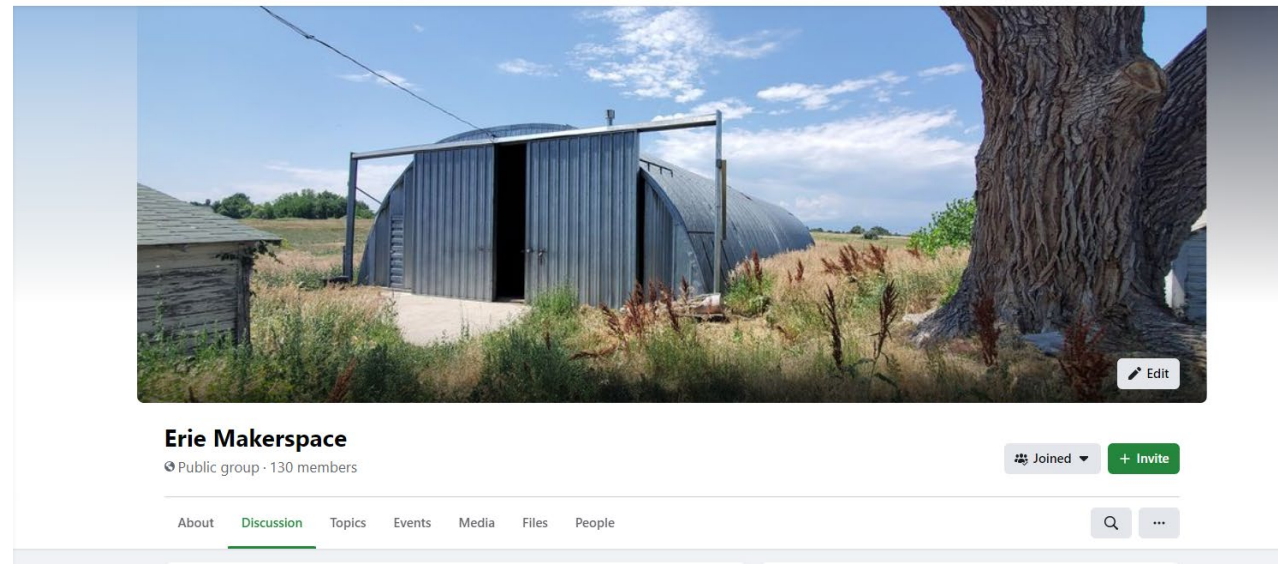
Equipment Inventory Tool

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	COLOR KEY: RED > YELLOW > GREEN > BLUE													
2							red qty	red \$	yell qty	yell \$	grn qty	green \$	blu qty	blue \$
3	Category		Item	Accessories	Estimated Cost	DONATION		\$0		\$0		\$0		\$0
4														
5	Safety Items		Dust Masks		\$7.00		0	\$0	0	\$0	0	\$0	0	\$0
6			Ear Muff		\$3.00			\$0		\$0		\$0		\$0
7			First aid		\$20.00			\$0		\$0		\$0		\$0
8			Safety glasses		\$2.00			\$0		\$0		\$0		\$0
9			eye wash		\$2.00			\$0		\$0		\$0		\$0
10			disposable ear plugs		\$2.00			\$0		\$0		\$0		\$0
11			face shield		\$2.00			\$0		\$0		\$0		\$0
12			Lock-out lock system		\$200.00			\$0		\$0		\$0		\$0
13			Fire extinguisher		\$20.00			\$0		\$0		\$0		\$0
14			Chemical cabinet		\$400.00			\$0	0	\$0	0	\$0		\$0
15			flammables bucket		\$200.00			\$0		\$0	0	\$0		\$0
16			Flammables cabinet		\$200.00			\$0		\$0	0	\$0		\$0
17			Other		\$0.00			\$0		\$0		\$0		\$0
18			Other		\$0.00			\$0		\$0		\$0		\$0
19														
20	Education		Tables					\$0		\$0	0	\$0		\$0 foldable
21			Chairs		\$15.00			\$0		\$0		\$0		\$0 foldable
22			Projector	Screen	\$0.00			\$0		\$0		\$0		\$0
23			Whiteboard	Marker/Erasers	\$0.00			\$0		\$0		\$0		\$0
24			Other		\$0.00			\$0		\$0		\$0		\$0
25			Other		\$0.00			\$0		\$0		\$0		\$0
26														
27	Janitorial		Broom	dust pan	\$10.00			\$0		\$0		\$0		\$0
28			Mop and Mop Bucket		\$30.00			\$0		\$0		\$0		\$0
29			Trash Can		\$20.00			\$0		\$0		\$0		\$0
30			Shop Vacuum		\$40.00			\$0		\$0		\$0		\$0
31								\$0		\$0		\$0		\$0
32								\$0		\$0		\$0		\$0
33														
34	Manual Machining		Knee mill		\$0.00			\$0		\$0		\$0	0	\$0
35			small manual mill					\$0		\$0		\$0		\$0
36			Lathe	A lot!	\$0.00			\$0		\$0		\$0		\$0
37			Band saw	Saw Blades	\$0.00			\$0		\$0		\$0		\$0
38			Grinder	Grinding wheels	\$50.00			\$0		\$0	0	\$0		\$0
39			buffing wheel					\$0		\$0		\$0		\$0
40			Tap and Die set		\$200.00			\$0		\$0		\$0		\$0
41			sand blaster with cabinet					\$0		\$0		\$0		\$0
42			metal belt sander					\$0		\$0		\$0		\$0
43			metal chop saw (abrasive)					\$0		\$0		\$0		\$0
44			soft metal chop saw					\$0		\$0		\$0		\$0

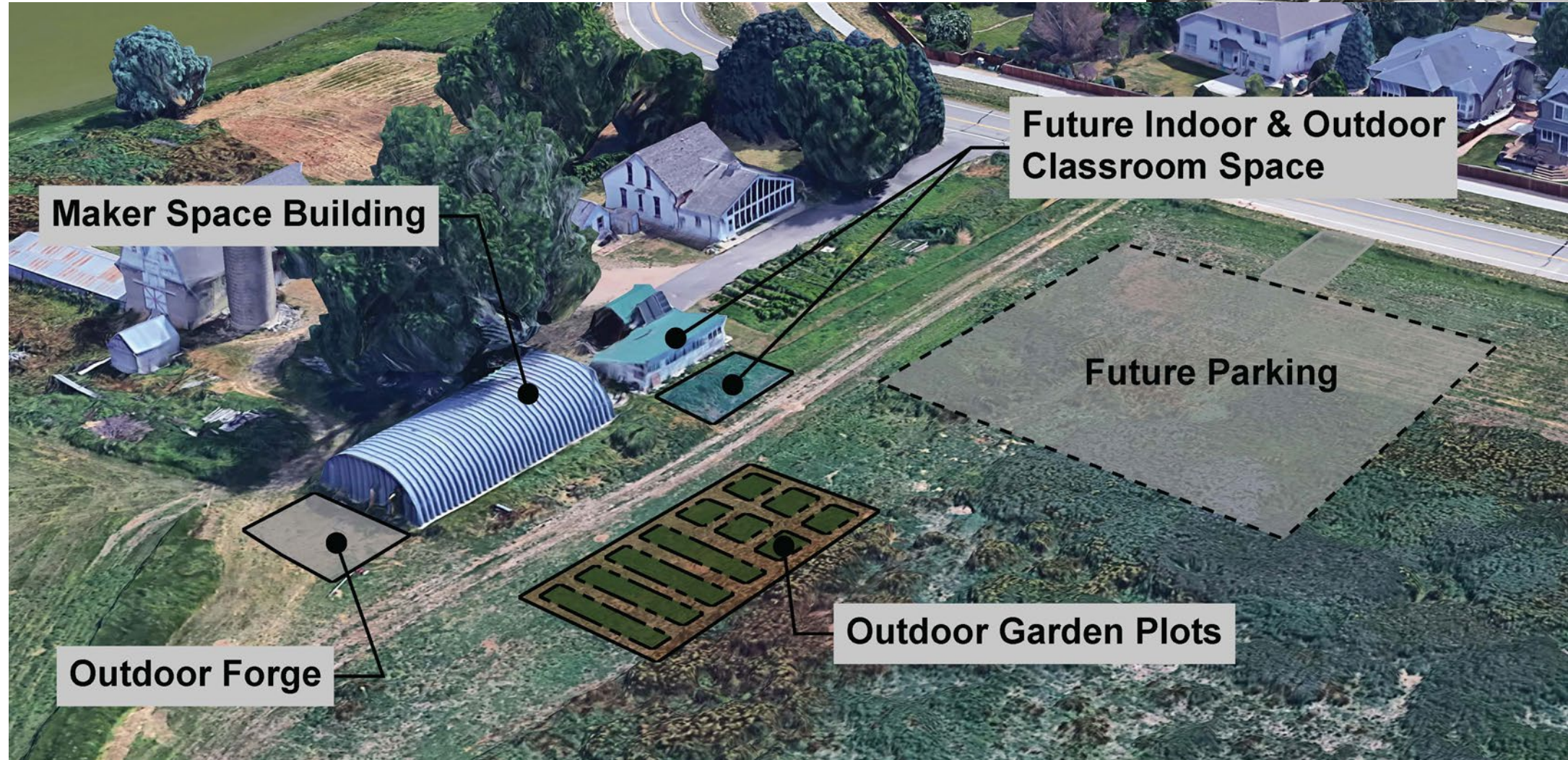
#4

Create a community presence and become visible to other makers.

- Participate in civic events
- Identify activities and classes that can be hosted at the farm site.
- Create a social media presence.
- Identify new members and volunteers.



Track #2 – Building Feasibility



#1

Take advantage of
what the space has
to offer now!

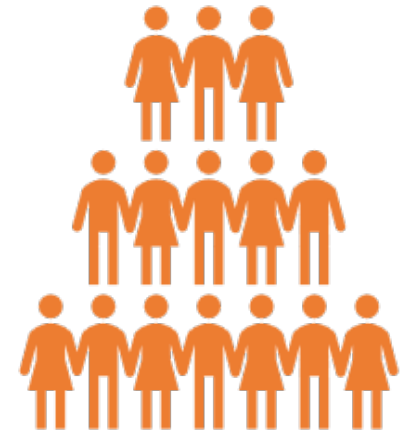
- Work with the Town to organize sharing and social events at the space.
- Consider starting a community garden space while the building is being evaluated.
- Forging demonstrations and other maker driven activities.



#2

Promote collaboration with the Erie Maker community, the Erie Community Library and other partners.

- Continue to work in collaboration with the town to identify the building needs.
- Seek ways to collaborate and support the growth of the Maker Community:
 - Seek grant funding and leverage community resources
 - Provide some limited staff support, meeting space or in-kind support.
- Create an operating partnership with the Erie Community Library to support programming activities.



#3

Complete a preliminary design concept and construction drawings for the Quonset hut as the location for the makerspace

<u>Item</u>	<u>Cost</u>
Preliminary Conceptual Design and Programming including a code analysis	\$15,000 to \$20,000
Construction Drawings/Engineering and Permitting etc.	\$45,000 to \$60,000
Construction/Hard Costs	\$300,000 to \$400,000
Contingency @10%	\$30,000 to \$40,000
Preliminary Estimate	\$390,000 to \$520,000

- Did assess other potential locations.
- Cost prohibitive based on current conditions.
- Not recommending major investment in the Quonset hut building until there is a demonstrated organizational capacity.
- Need to coordinate with other planned activates at the farm site.

Next Steps

- Continue to build out the Erie Makerspace Community
 - Identify leaders
 - Build local partnerships including the library
 - Develop equipment inventory and wish list
- Look at opportunities to use the space for limited events and demonstrations.
 - Community garden
 - Forging demonstrations
 - Social activities with the Makergroup

The top half of the slide features a dark blue background with a faint, artistic image of hands. Overlaid on this are several white, 3D-style question marks of varying sizes, creating a sense of inquiry and uncertainty.

Questions and Answers



Thank You