

# Pathway Polymer

## Families in transition

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# The team

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**The Opportunity**

# Our why



To provide **better alternatives** for emergency housing that will benefit the the homeless families safely transition to permanent housing

# Homeless in Allegeheny County



1,146 individuals/year

Allegheny County Analytics, 2016



\$40,000/person/year

HUD, 2010

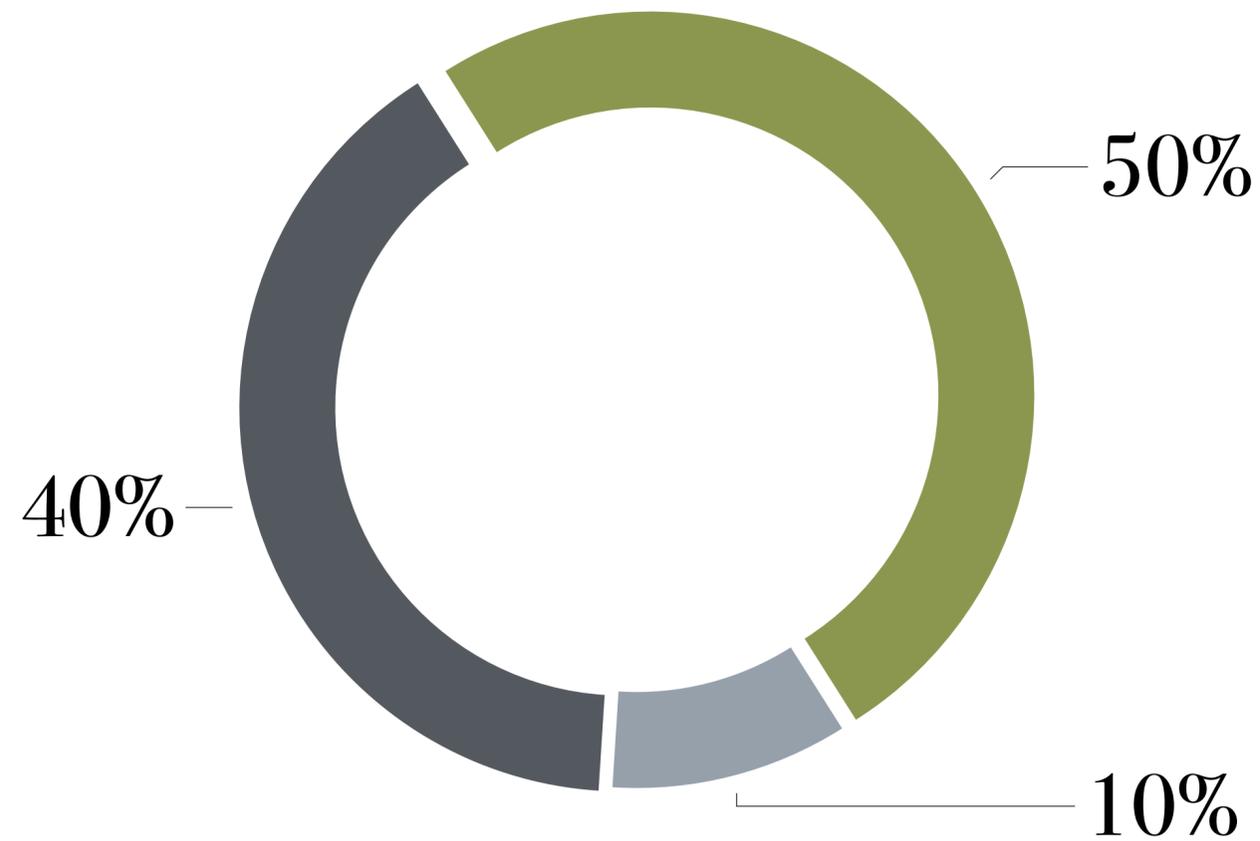
# Homeless



**“For families, emergency shelters are usually equally or more expensive than transitional housing and permanent housing ... families are often given private rooms and [there are] fewer units, yielding higher fixed costs.”**

– HUD report on Homelessness, 2010

# Target Population



Allegheny County Analytics, 2016

**862 Families**

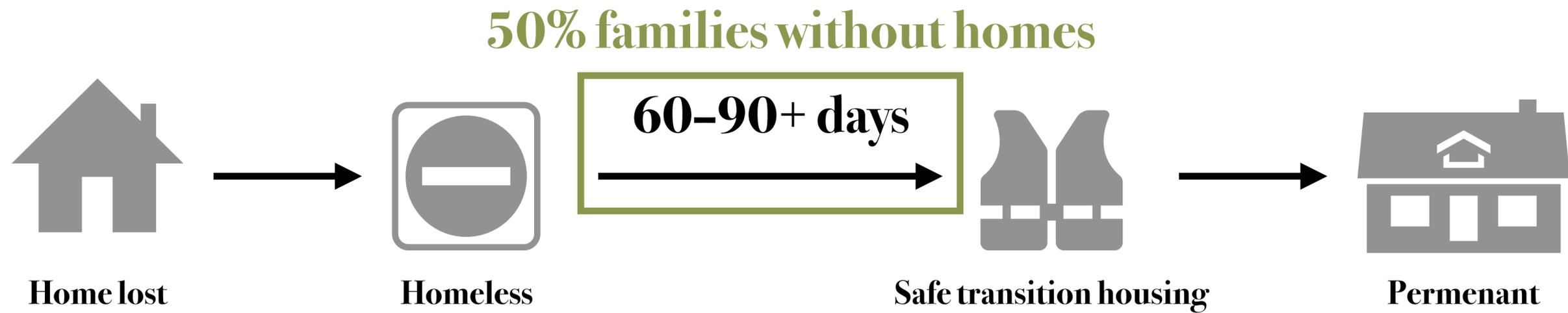
Avg 4 people/family

**\$13.7M/yr**

Per 4 person family

Allegheny County Analytics, 2016

# User Journey





**Finding a Solution**

# Shape Memory Polymers



**Polymer  
(or alloy)**



**Create bed**



**Reduce to  
Flat sheet**

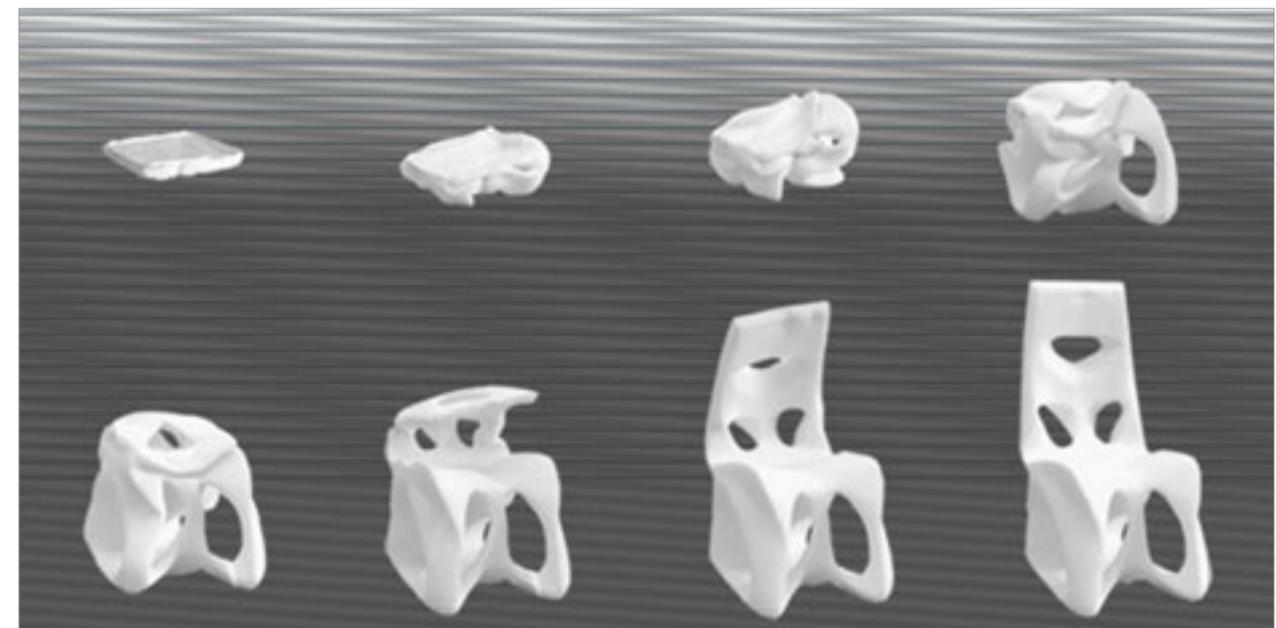
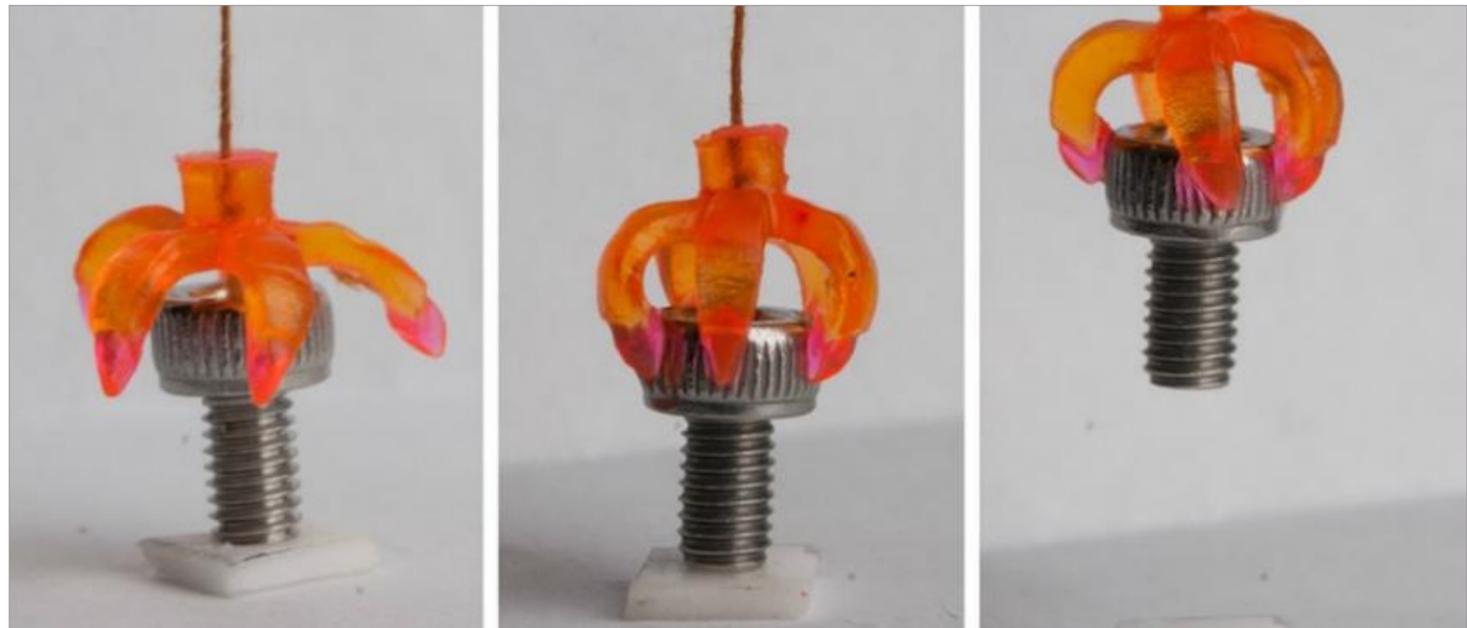


**Add  
Current**



**Shape is  
Reformed**

# Shape Memory Polymers



# Cost-benefit analysis

	Current Costs	Polymer Costs	Savings	
	<b>\$50K</b> Per family housing/ year	<b>\$10K</b> Per family / year	<b>\$42K</b> Per family / year	Scalable 40% inc. families
	<b>\$20K</b> Per family / year	<b>\$750</b> Per family / year	<b>\$750</b> Per family / year	Decrease child Removal costs

Allegheny County Analytics, 2016

\*Costs include materials, labor,  
and shipping

\*Savings per family



Implementation

# Implementation plan



# Stakeholders & Partnerships



**SELF -  
ASSEMBLY  
LAB**





# Considerations

# Program evaluation



- Measure the decrease of number of families on street and homeless shelter
- Measure the decrease of time families spend in homeless shelters and transition homes
- Utilize school children attendance/vagrancy to measure family moves and school stability

# Key Challenges



**Networks**



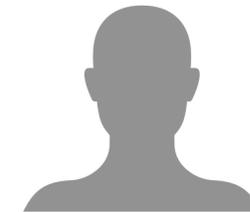
**Location**



**Longevity**



**Regulations**



**Community**

# Impact



- Alleviate current homeless centers
- Cost effective
- Family stability
- New alternative to help with changing family



  
**Thank you!**