

Lean Six Sigma Project Report Out  
Randall Schumacher &  
Karen Montgomery  
Public Utilities Commission of Ohio  
June 4<sup>th</sup>, 2020



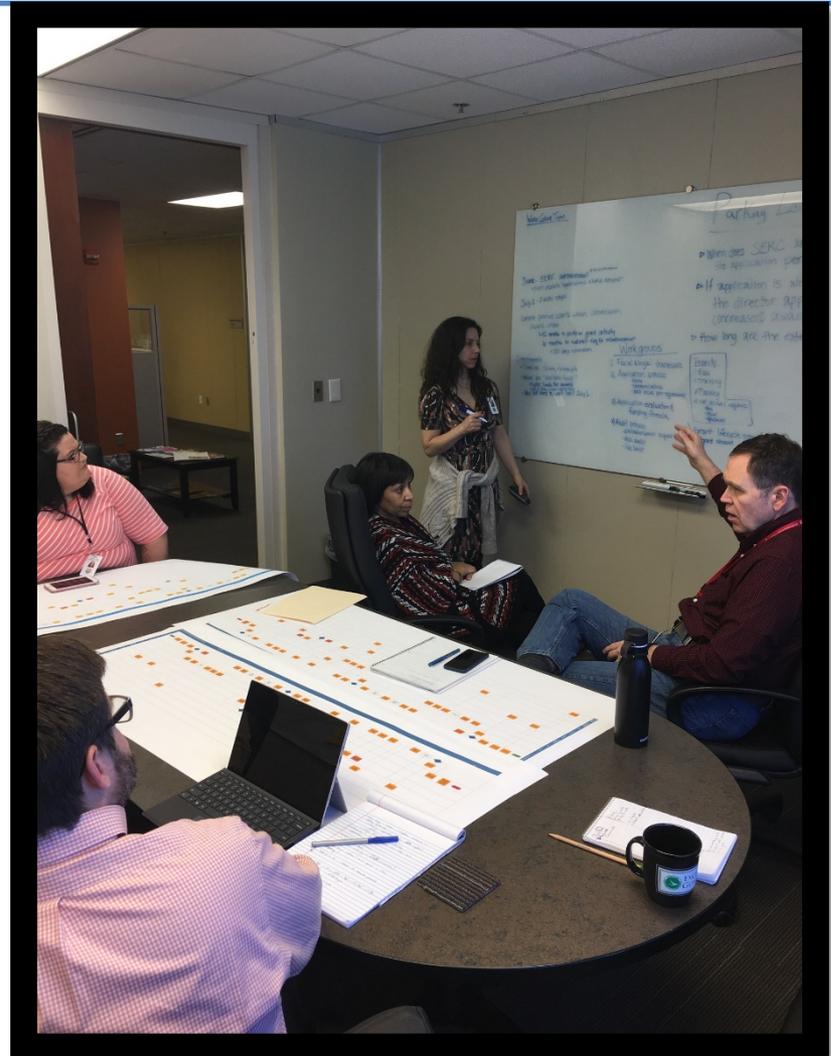
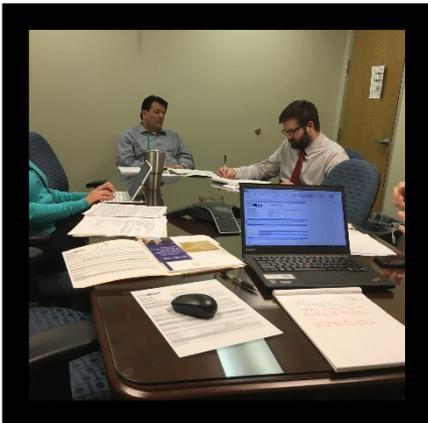
# Hazardous Materials Training and Planning Fund Redesign

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# PUCO Team

## Public Utilities Commission

- Dan Fisher, Grant Manager
- Tina Watkins, Fiscal Officer
- Donald Leming, Legal
- Randall Schumacher
- Karen Montgomery



# Importance of Project

- Funds for the first time in recent memory were becoming competitive – defensible process was needed more than ever
- Critically impactful to applicants who depend on money
- Sub-optimal process was creating more work to other Divisions
- General Accountability

# Background - Scope

- Problems:
  - lacking standardization & documentation
  - legal and fiscal SME concerns
  - unclear timeline & public communication
  - long, overly burdensome application process
- Scope:
  - First Step: Announcement of Availability
  - Last Step: Awardee Reimbursed

# Project Goals

- 1) ensure GAAP & proper legal principles are followed as guided by SME's
- 2) document and standardize process
- 3) reduce application burden
- 4) outline expectations and timelines to internal and external stakeholders

# Baseline data

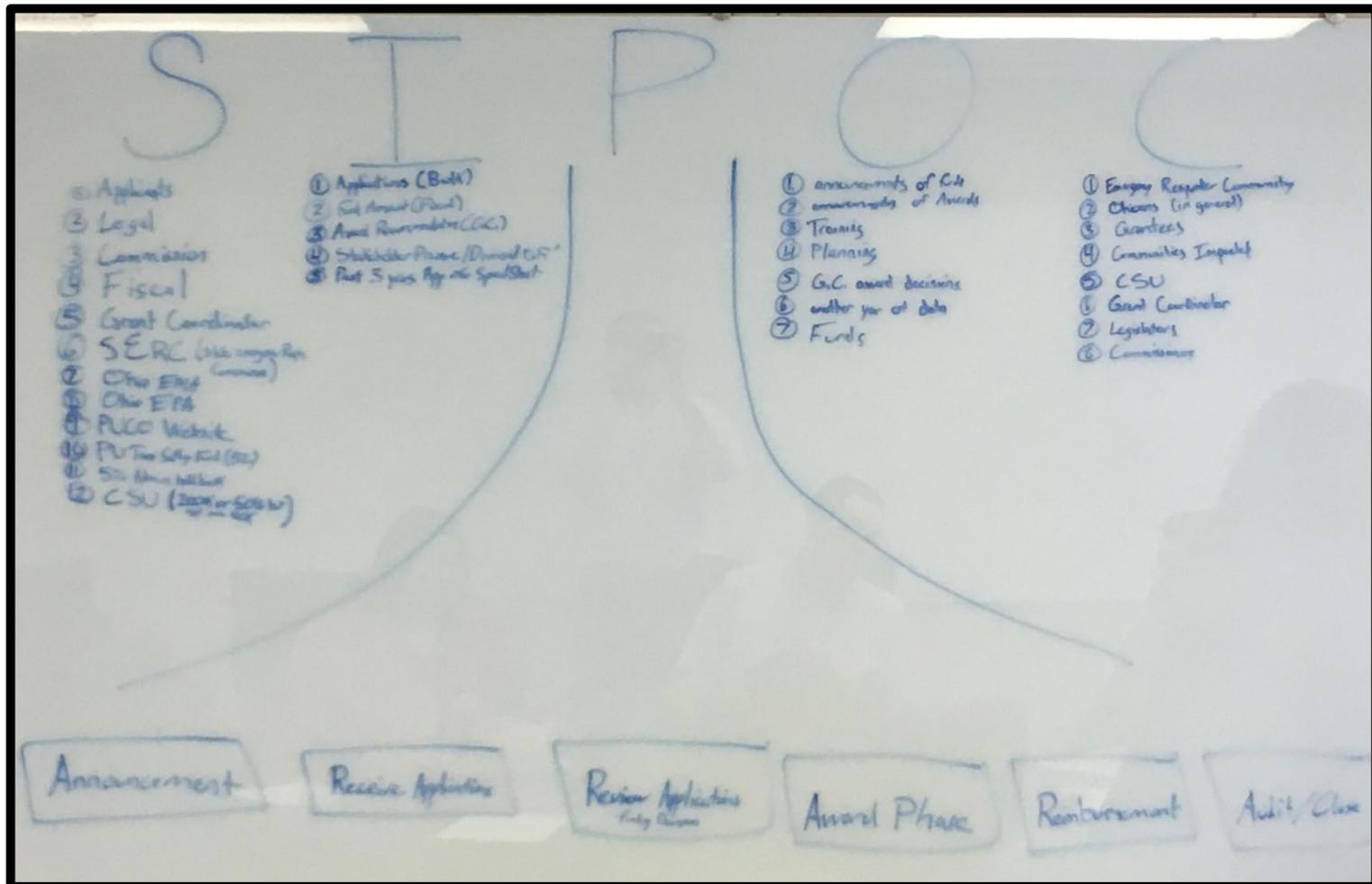
VERY Limited from the start:

- 3 years of previous application data limited to application dates & dates reimbursed (all different)
- Legal, fiscal & process owner SME weighted survey data (quantified professional opinion)
- Current application metrics
  - 16 pages,
  - 27 questions
- Application VOC Survey (current)
  - 2 hour completion time
  - 57% customer satisfaction
- Process VOC Survey (current)

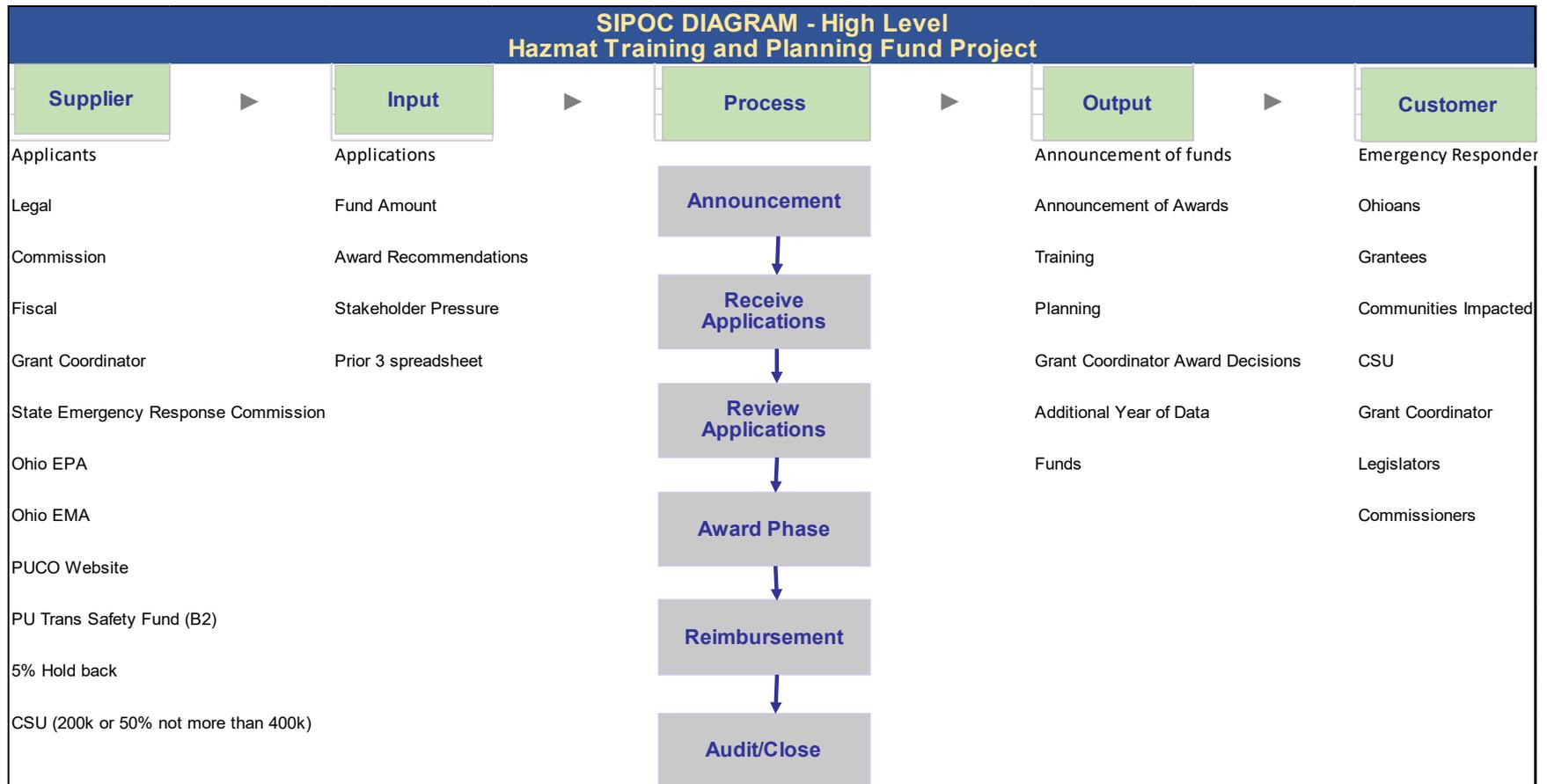
# Data Collection Plan

- Process analysis (scorecard)
- SME weighted survey (current/final)
- VOC application survey (current/final)
- VOC process survey (current/final)

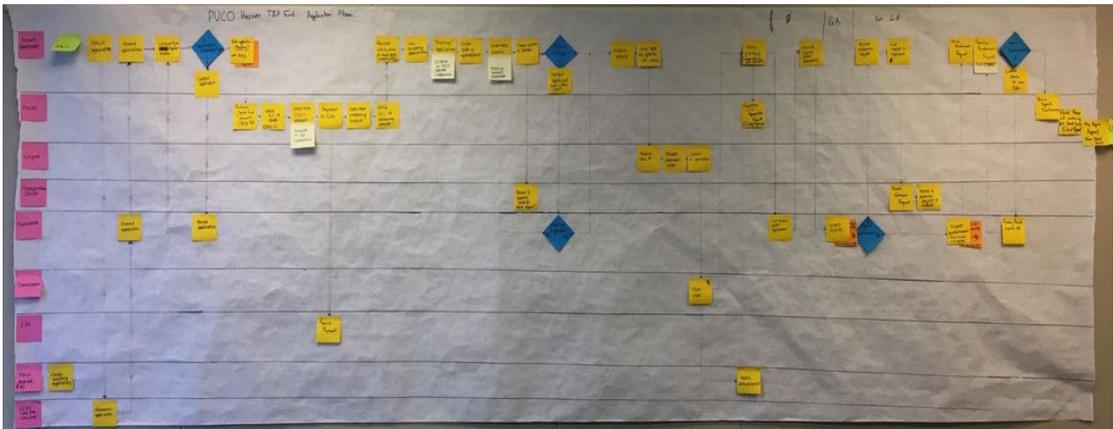
# High level process - SIPOC



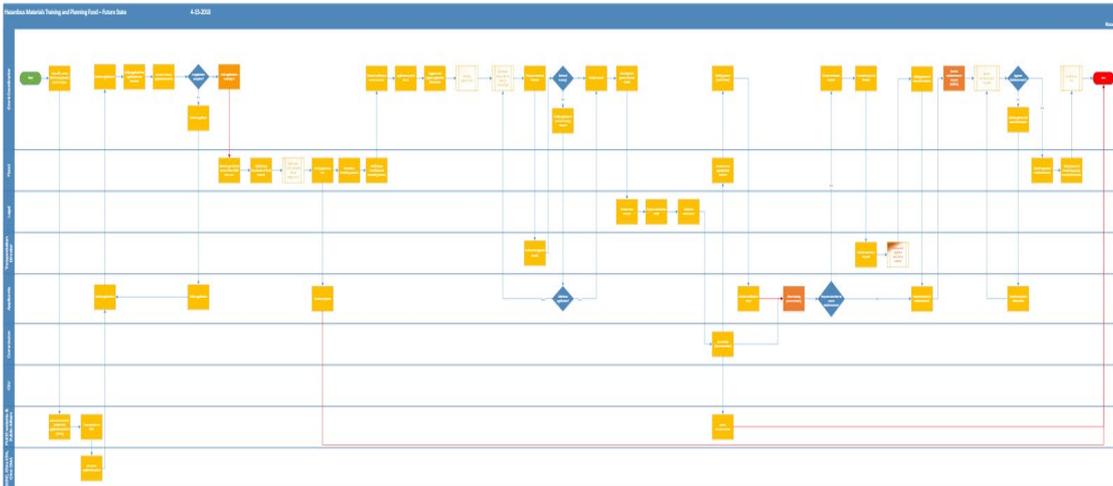
# High level process - SIPOC



# Process Map/Survey



Process SCORECARD	Current	Future	Change
Process Steps	55	46	-17%
VOC "Very Satisfied"	29%	86%	+57%
SME Approval	55%	98%	+43%



\*Added Critical Steps\*

# Weighted Survey - SME

## Weighted Responses

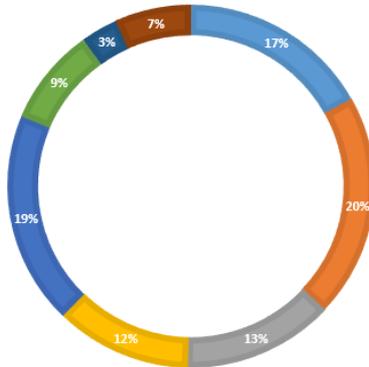
SME 1 (Legal)		
RESPONSES	WEIGHT	
1 APP GRANT SELECTION	20	
2 GRANT DOC'S/APPLICATIONS	10	
3 FUNDING - (availability,etc)	10	
4 OVERSIGHT/MONITORING	5	
5 GRANT TIMELINE/CYCLE	5	
	<b>50</b>	

SME 2 (Fiscal)		
RESPONSES	WEIGHT	
1 BUDGET	13	
2 GRANT TIMELINE/CYCLE	13	
3 APP GRANT SELECTION	5.5	
4 OVERSIGHT/MONITORING	13	
5 GRANT TIMELINE/CYCLE	5.5	
	<b>50</b>	

SME 3 (P.O.)		
RESPONSES	WEIGHT	
1 FUNDING - (availability,etc)	10	
2 COMMUNICATIONS	5	
3 GRANT DOC'S/APPLICATIONS	20	
4 ROLES DIVISION OF LABOR	10	
5 GRANT TIMELINE/CYCLE	5	
	<b>50</b>	

## GROUP RESULTS

- APP GRANT SELECTION
- GRANT DOC'S/APPLICATIONS
- FUNDING - (availability,etc)
- OVERSIGHT/MONITORING
- GRANT TIMELINE/CYCLE
- BUDGET
- COMMUNICATIONS
- ROLES DIVISION OF LABOR



## SME Score Card

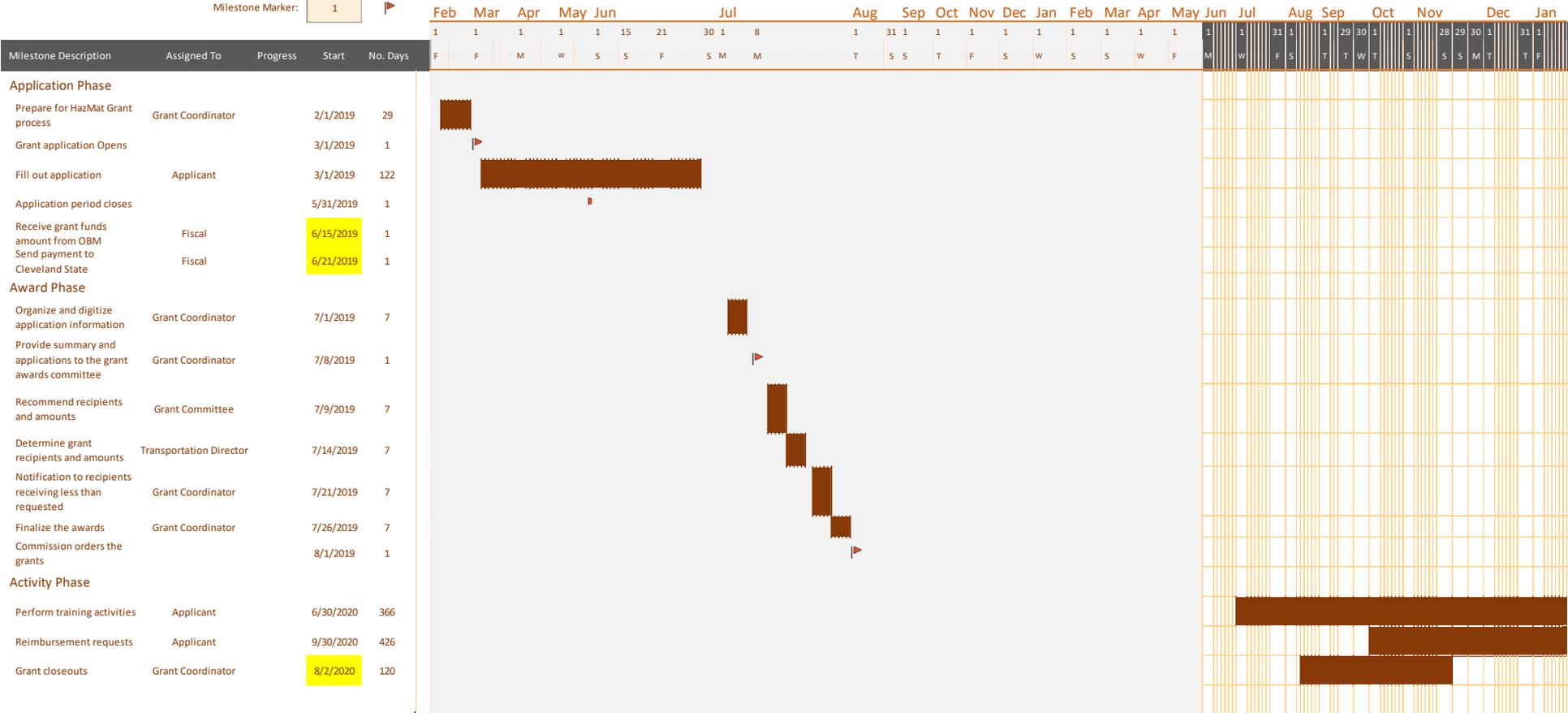
SME	Initial	Final	Change
Legal	40%	98%	58%
Fiscal	75%	94.80%	19.80%
Process Owner	50%	100%	50%
<b>TOTAL</b>	<b>55%</b>	<b>98%</b>	<b>43%</b>

NOTE: Figures are rounded

# Timeline / Gantt

## HazMat Training Timeline

PUCO  
 Randall Schumacher  
 Project Start Date:   
 Scrolling Increment:     
 Milestone Marker:



To add more data, Insert new rows ABOVE this one

# Application - Poka Yoke A3

Title: HazMat Training and Planning Fund application

Team: HazMat Grant Team

Date started: 3/6/2018 Current Date:

Executive Sponsor: Transportation Director and Chairman Haque

Your name: Karen Stone

## P1: Why Change is Needed

The application for training and fund takes a considerable amount of time to complete and not all sections apply to all applicants. The data contained in the applications is not in an electronically usable format. Subject matter experts require legal language to be added in the application to ensure compliance.

## P2: Current State

Applicants download the application packet, which is 16 pages, from the PUCO website and complete the primary application form and worksheets based on the type of hazmat training or planning. Applicants print, sign and mail or email the application. The HazMat grant coordinator manually enters application information into a spreadsheet during the initial review. During the reimbursement phase, the HazMat grant coordinator reviews each reimbursement request, comparing it to the fund types requested on the application.

## P3: Future State

Applicants would like to submit the application electronically and have a clear timeline for when the application period opens and closes. The PUCO HazMat Grant team would like the application information in a trackable format and would like to application to have legal language so that it is self-executing if funds are approved by the Commission.

## P4: Analysis

HazMat Grant Coordinator administered a survey to the past grant applicants. Applicants report that it takes 30 to 240 minutes to complete the application, with the average completion time at 111 minutes. Six of seven survey respondents stated they would prefer to submit the application electronically. Three of seven suggestions to improve the grant application process were about the application itself.

HazMat Grant Project lead administered a survey to the subject matter experts representing the legal, fiscal and hazmat grant departments. Respondents provided weighted responses, and grant documents/applications ranked highest on their list of priorities to "fix" in the project.

## P5: Potential Solutions

Revise the application to eliminate unnecessary fields and/or pages.  
 Create the application in PDF to allow mapping of fields to CSV file.  
 Request applicants submit their applications electronically.  
 Add self-executing legal language in the application if the funds are awarded.  
 Put questions that apply to all applicants at the beginning, then questions for specific grant requests with clear instructions.  
 Group questions into sections with headings to help with flow.

## D6: Action Plan

Action Item:	Assigned to:	Due Date
Schedule poka yoke with team	Karen	6/8/2018
Make changes to the form & submit to team to review	Karen and Dan	6/15/2018
Make additional changes if needed	Karen and Dan	6/22/2018
Test form (time completion) and file export	Karen	6/29/2018
Write form instructions	Dan	7/6/2018

## C7: Check Results

	Current	Projected	Actual
# Pages	16	8	5
# Questions	27	20	18
Avg time to complete	111	90	107
Customer satisfaction	86%	90%	100%

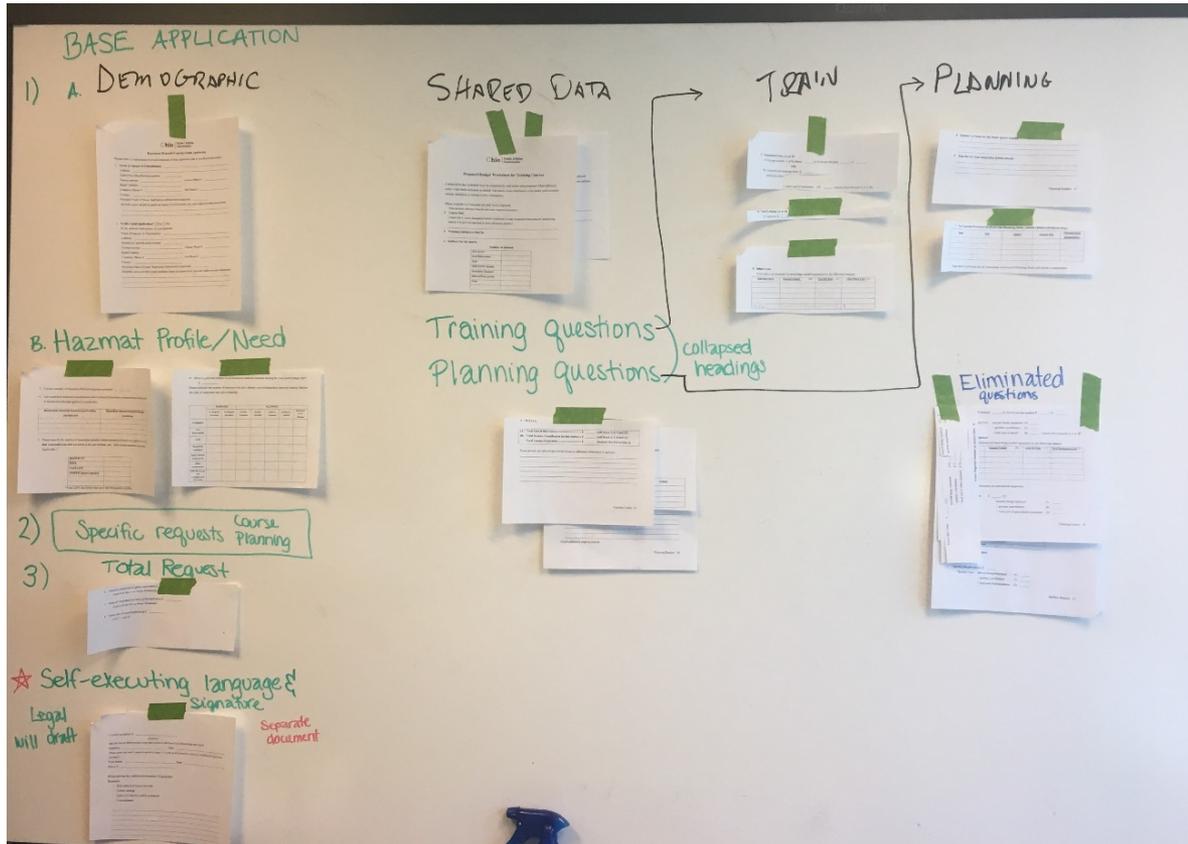
## C7: Check Results

Compliant with legal requirements.  
 Compliant with fiscal requirements.  
 Reduced data entry time for coordinator.  
 Reduced time for form completion.

## A8: Follow-up Action

Send survey to applicants at the close of the application period - June 30 to get actual results  
 Meet with new grant coordinator to further revise and improve the application

# Poka Yoke – Affinity Diagram



- An affinity diagram was also used to visually arrange during the poka yoke

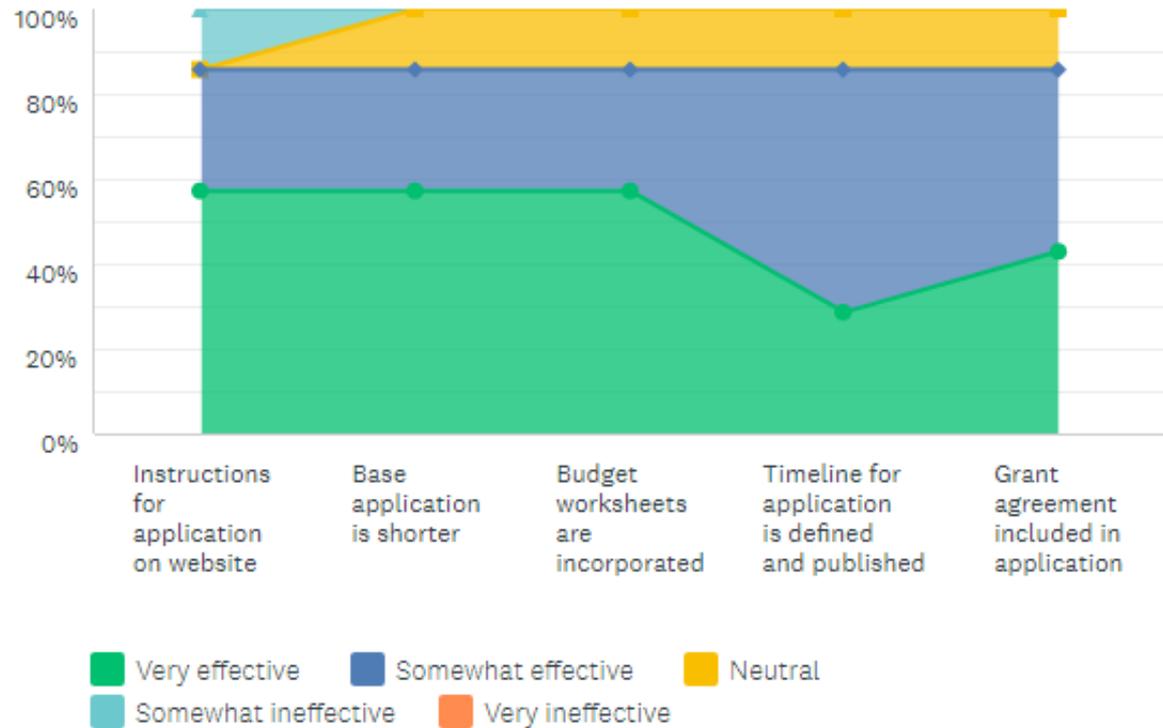
# Poka Yoke – Application/Overall Survey

CHECK SHEET	Current	Future	% change
# pages	16	5	↓ 69%
# questions	27	18	↓ 33%
Average time to complete	111	107	↓ 4 min*
Customer satisfaction	86%	100%	↑ 14% pts.
--very satisfied	29%	86%	↑ 57% pts.

We significantly decreased the number of pages to the application by combining questions that were alike.

# Poka Yoke – Application VOC Survey

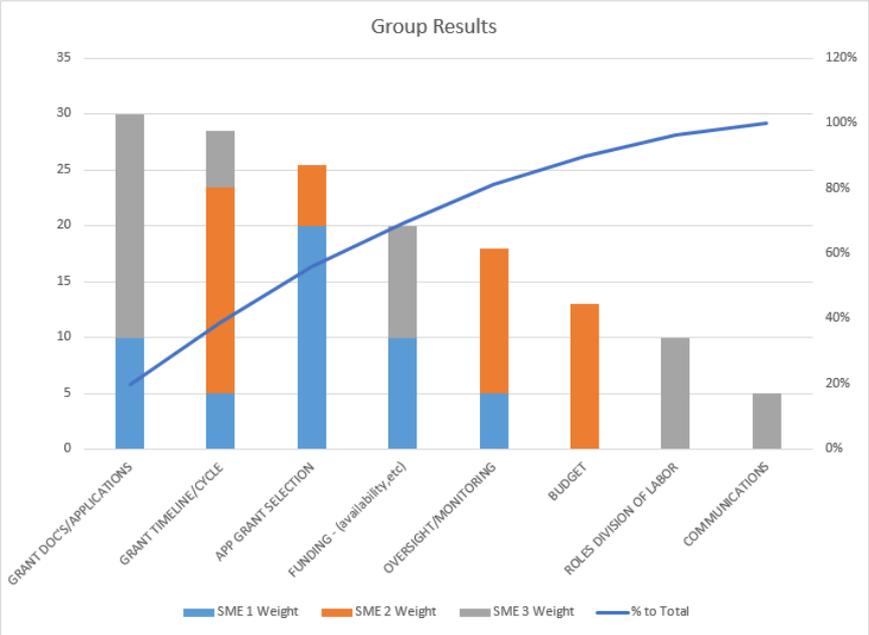
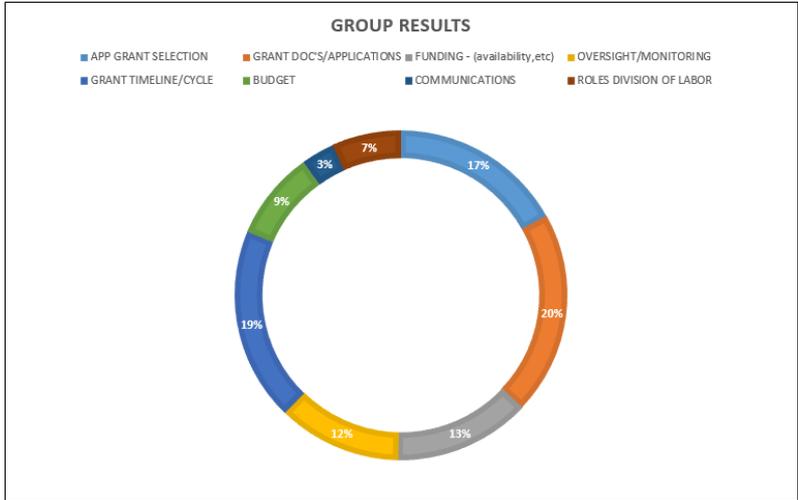
80% of grant applicants are satisfied with the changes to the application



# Graphical Displays

PIE CHART (SME Concerns)

Pareto (SME Concerns)



# Tools Used

- Weighted Survey
- Action Register
- Project Charter
- Poka Yoke
- Affinity Diagram
- Process Map
- Operational Definitions
- Brainstorming
- Voice of Customer
- Standard Work
- A3 (Applications)
- SIPOC
- Timeline
- Check sheet
- Graphical Displays
  - Pareto Chart
  - Pie Chart
  - Gantt

# Project Benefits - Intangible

- **Morale - Sense of organization and efficiency positively impacts the process owner**
- **Trust - External respect for the results of awards and the process as a whole**
- **Durability – a well thought-out and controlled process is less likely to come under *legitimate* scrutiny**

# Improvement summary

## Current Key Issues



Application is long and outdated



SME Concerns (Legal, Fiscal,  
Grant Manager)



No set timeline both  
internal/external

## How We Improved



Improved application reduced  
burden to applicant



Implemented professional  
“best practices”



Created a rigid timeline and  
communicated to applicants

# As A Result

- Shorter application that's accessible on PUCO website with digital submission options
- Timeline and grant cycle are clearly communicated on the website for applicants in single location
- From a fiscal & legal perspective the process is satisfactory and not *foreseen* to present a liability
- Internally, all stakeholders understand the expectations regarding the work products and timetables
- Uniform messaging curated by PUCO Public Affairs

# Special *thanks* to...

**Karen Montgomery**

**Greg Hughes**

**Tina Watkins**

**Dan Fisher**

**Don Leming**

**Tina Holbert**

**Milan Orbovich**

**John Williams**

**Bev Hoskinson**

**Joe Rust**

**HazMat Grant Applicants**

**PUCO LeanTeam (OCI)**

**LeanOhio Team**



*Great Job!*

# Questions/comments

