



# Root Cause Analysis Toolkit

Equity, Prevention, and Systems Thinking

# Health Equity

Health equity is achieved when every person has the opportunity to “attain their full health potential” and no one is “disadvantaged from achieving this potential because of social position or other socially determined circumstances.”

–CDC 2022

# Equity Statement

This toolkit is designed to support TDH's mission "To protect, promote and improve the health and prosperity of people in Tennessee". We acknowledge that systemic and historic inequities contribute to the current state of many health issues facing our communities today. These exercises intentionally center equity as a lens for systems change in order to improve health for all Tennesseans.

# What is a Root Cause?

- A root cause is the core issue– the highest-level cause that sets in motion the entire cause-and-effect reaction that ultimately leads to the problem(s).
- When addressing health, root causes are often **indirect** and **systemic** in nature. Ex.) Education, policy, employment opportunities, etc.

# What is a Root Cause Analysis Exercise?

- An activity designed to help your team identify goals, opportunities, and health concerns facing the community.
- In addition to addressing public health issues from a “treatment” perspective, RCA is meant to help us think of ways to **prevent** illness and disease before it occurs.

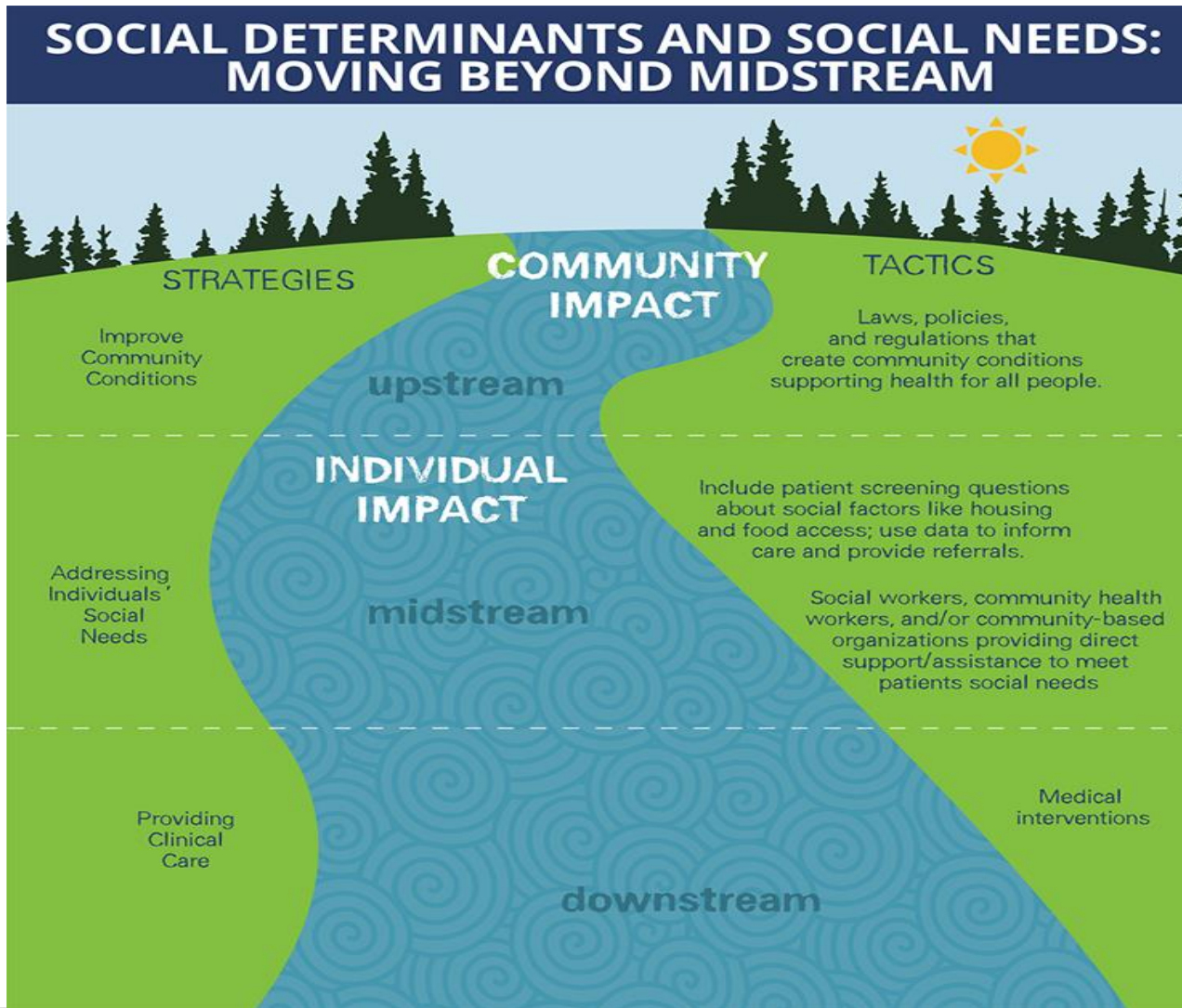
**“An apple a day keeps the doctor away.”**

# The Purpose of the Exercise

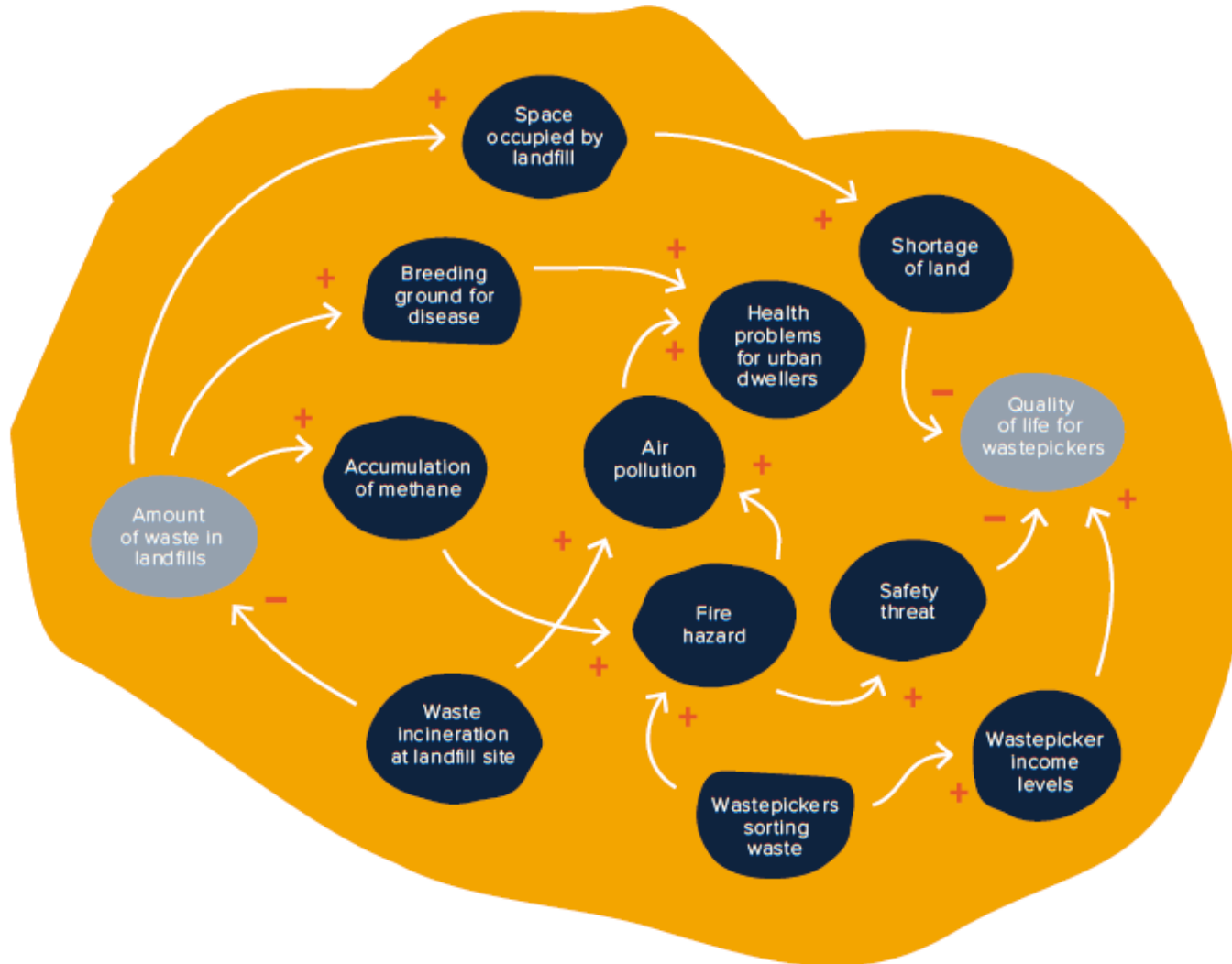
- The purpose of this exercise is to engage **upstream** and **systems thinking** to address health outcomes in our communities.
- This activity is designed to provide guidance for teams and to support **existing** workflows/projects.

**“An ounce of prevention is worth a pound of cure.”**

# Upstream Thinking



# Systems Thinking





# The Root Cause Analysis Process

## 1. The 5 Why's Exercise

- Identify contributing factors and root causes of a health outcome in the community.

## 2. Fishbone Diagram

- Understand systems that contribute to a health outcome, identify key partners, and operationalize goals.

## 3. Action Steps

- A roadmap to move forward.

# The 5 Why's

Problem Statement

Type here...

Why?

Name

Name

Name

Name

Name

Type here...

Type here...

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Why?

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# The 5 Why's

## Problem Statement

75% increase in asthma diagnoses for children in Rural County, TN in 2022.

Why?

Sam

Joe

Ashley

Jill

Name

Dated school buildings

Lots of toxic fumes in county

Mold found in homes in 40% of cases

68% children diagnosed were obese- at increased risk for asthma

Type here...

Why?

Insufficient funding for the last 10 years

New wastepant on 72nd Ave.

Mold caused by damage from 2020 flood

Do not eat a balanced diet

Type here...

Why?

Low standardized test scores

Rural chosen b/c land was cheap

Parents were unaware of health risks, did not treat mold properly

Parents don't buy fresh produce, whole grain, lean meats, etc.

Type here...

Why?

Overcrowded classrooms

Labeled as a distressed county

Thought treatment would be too expensive

Processed foods quick to make/easy to access

Type here...

Why?

Teacher shortage in district

Few job opportunities since car plant closing in 1995

Couldn't afford other home improvements

20 mins from nearest supermarket, 5 mins from 4 convenient stores

Type here...

Fictional Example

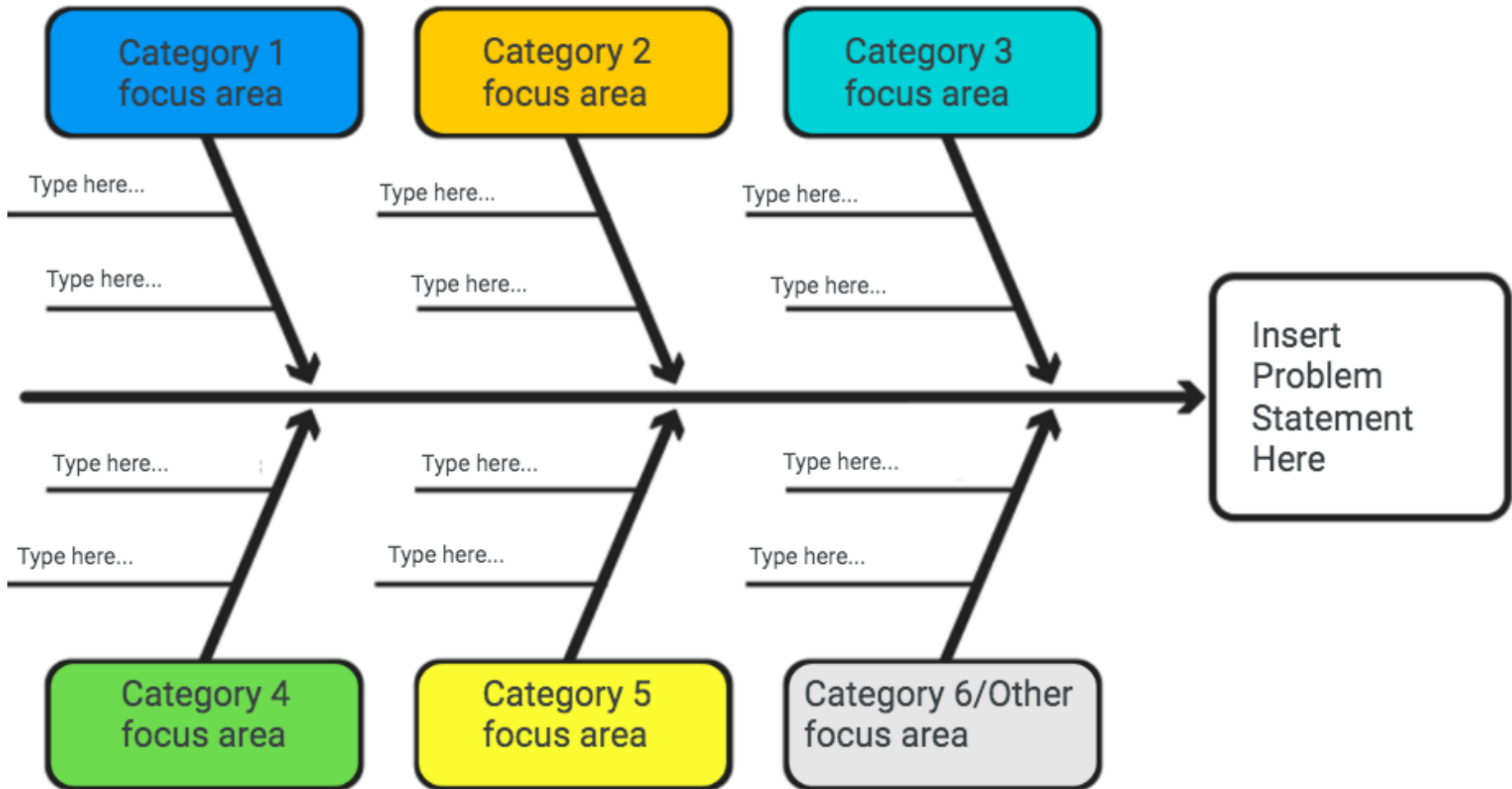
# Fishbone Diagram

Category 1	Category 2	Category 3	Category 4	Category 5

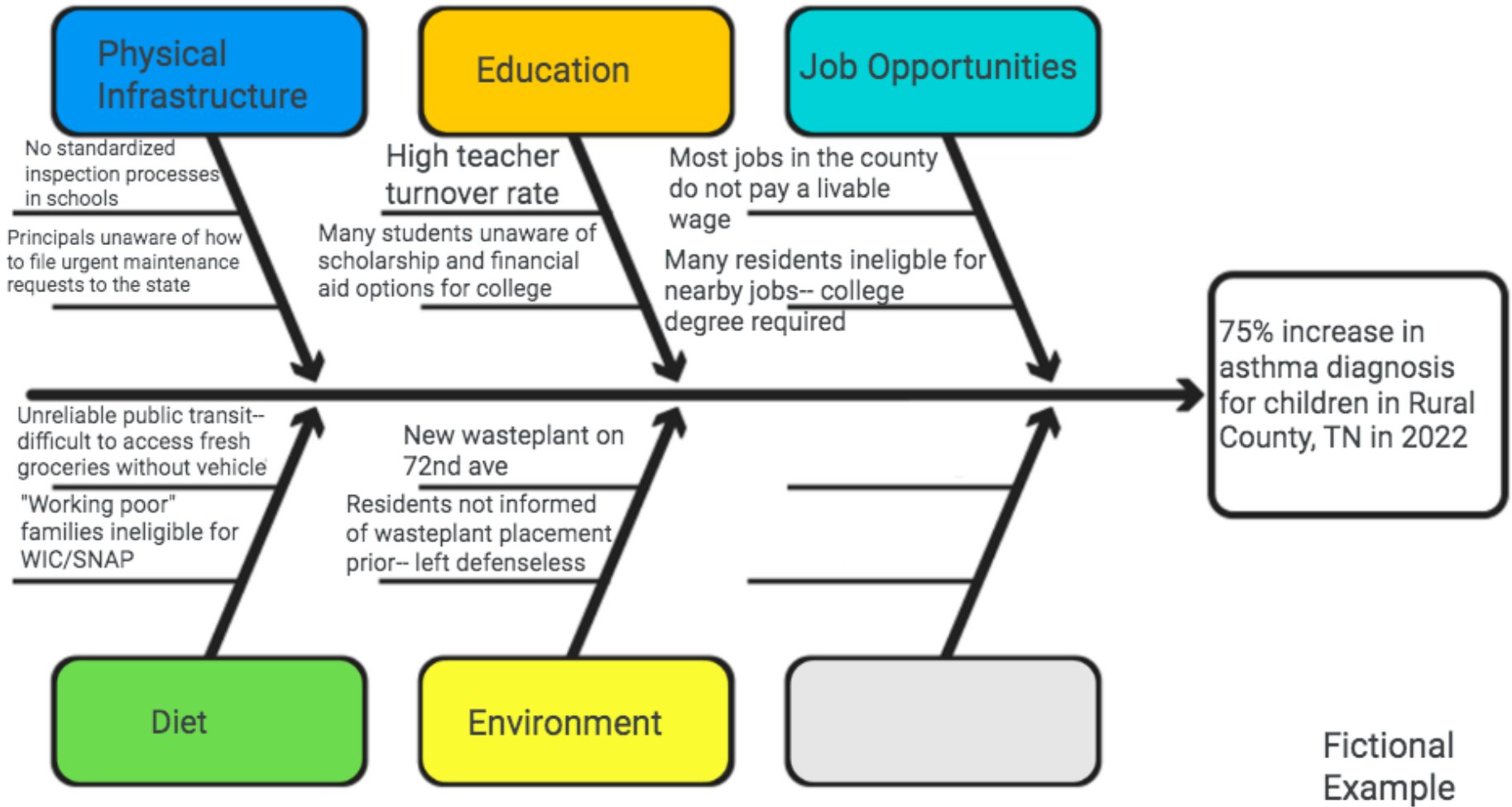
# Fishbone Diagram

<b>Category 1</b> Physical infrastructure	<b>Category 2</b> Education	<b>Category 3</b> Job Opportunities	<b>Category 4</b> Diet	<b>Category 5</b> Environment
<p>Mold in homes--moisture retention around improperly sealed windows and doors</p> <p>Something in old school buildings causing flareups. What could this be?</p>	<p>Schools underfunded</p> <p>Overcrowded classrooms</p> <p>Teacher shortage--less personal instruction</p> <p>School funding based on performance, not offered resources to increase performance</p> <p>Many parents are new homeowners-- unaware of how to identify maintenance concerns</p>	<p>County heavily impoverished since Toyota factory shut down-- many jobs lost</p> <p>43% of available full-time jobs in the county don't provide a livable wage</p> <p>66% of parents work more than one job to make ends meet</p> <p>Many better paying jobs in the nearby Forrest county require a college degree--only 18% of adults in the county have a degree beyond high school</p>	<p>Families in the east end of town live near dollar stores/convenience markets</p> <p>Frozen meals and pre-packaged snacks make up most of the diets on Logan County's east side</p> <p>Only 2 supermarkets in the county, both in the south (middle class) end of the county</p> <p>Many children only receive whole meals at school. Food available at home is mostly snack/junk food.</p>	<p>Wasteplant on 72nd Ave.</p> <p>Increased rates of sulfur dioxide and nitrogen oxides in the air (pollution)</p> <p>Especially visible and smelly to residents in east Logan county-- highest number of asthma cases here</p> <p><b>Fictional Example</b></p>

# Fishbone Diagram

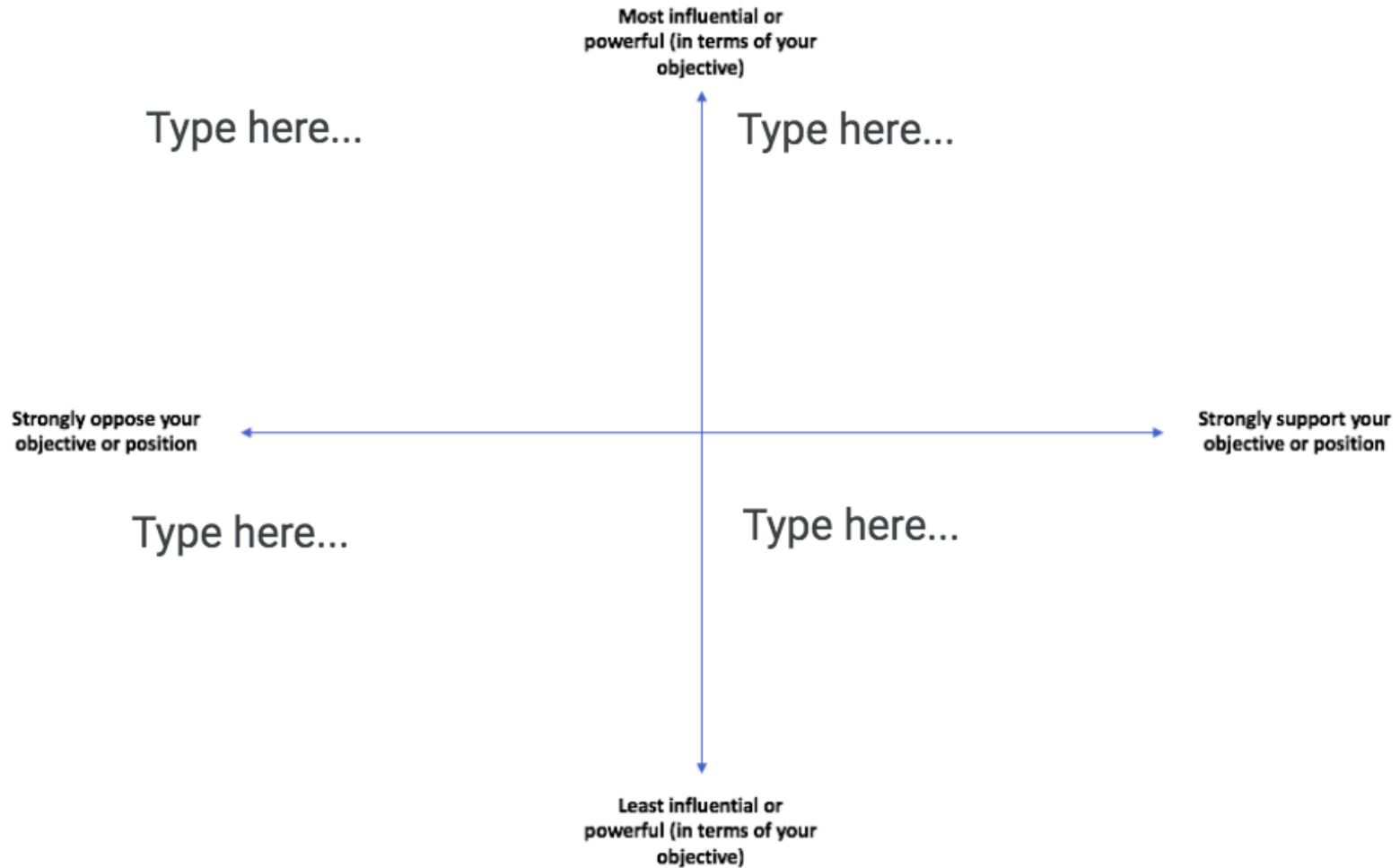


# Fishbone Diagram



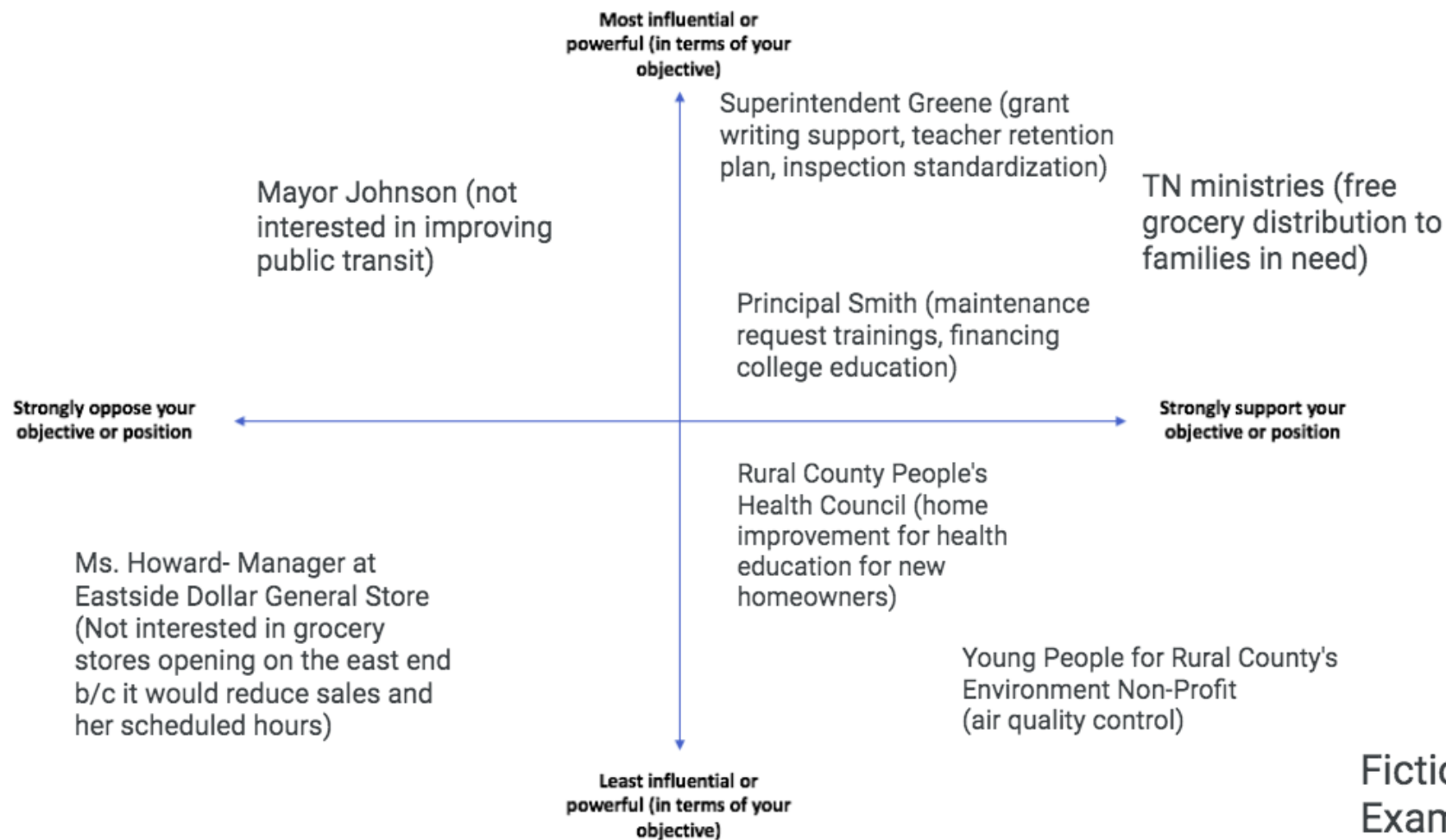


# \*Optional\* Power Analysis

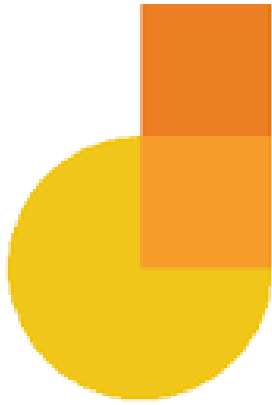




# \*Optional\* Power Analysis



Fictional Example



Jamboard



TM

[Link to Google Jamboard](#)

# Action Steps

- Guiding Questions
  1. How did this exercise provide a new perspective to the work you are already doing?
  2. How will you incorporate it?
  3. What remaining questions does your team have after completing this exercise?
  4. What are 1-3 action items your team can take following this exercise? What is the timeline?
  5. How will you ensure that your team centers equity as you move throughout this process?



## Contact Info

Director, Office of Primary  
Prevention

John Vick

[john.vick@tn.gov](mailto:john.vick@tn.gov)