

<p>1. Define the Objective</p> <p>What is the business or operational question you are trying to answer?</p> <p>Are specific rural areas in our county classified as food deserts? If so, what interventions could improve fresh food access for these areas?</p>	<p>2. Establish a Hypothesis</p> <p>What do you think the answer is, and why?</p> <p>I hypothesize that low-income rural areas more than 10 miles from grocery stores are food deserts and would benefit from interventions like mobile grocery markets or subsidies for local stores to stock fresh food.</p>	<p>3. Collect Relevant Data</p> <p>What data do you need to answer your question? Where will you get it?</p> <p>Data Needed:</p> <ul style="list-style-type: none"> • Geographic locations of grocery stores. • Census data on income, population density, and transportation access. • Distance metrics for residents to the nearest store. <p>Sources: Public GIS databases, USDA food desert maps, census.gov.</p>
<p>4. Analyze the Data</p> <p>What method will you use to explore the data? How will you model scenarios?</p> <p>Method: Use GIS software to map grocery store locations and calculate the distance from residents to fresh food sources.</p> <p>Scenarios: Identify areas that meet USDA’s food desert criteria and simulate how new interventions (e.g., a mobile grocery truck) could reduce distance or increase access.</p>	<p>5. Interpret the Results</p> <p>What do the results tell you? Do they support or challenge your hypothesis?</p> <p>The analysis shows three counties with high percentages of residents more than 10 miles from grocery stores, overlapping with low-income populations.</p> <p>Transportation barriers are a key factor limiting access to fresh food.</p>	<p>6. Communicate Insights</p> <p>How will you present your findings? What visuals or stories will you use?</p> <p>Story: “Three counties in our region are food deserts, affecting over 25% of residents. A mobile grocery truck could reduce this by 50% within the first year.”</p> <p>Visuals:</p> <ul style="list-style-type: none"> • Use maps showing current food deserts and projected improvements with proposed interventions. • Include bar charts comparing food access before and after implementation.