

# Chicken Scratch Solutions










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Hypothesis Proven: 4  
Total Interviews: 81

# Product (MVP)

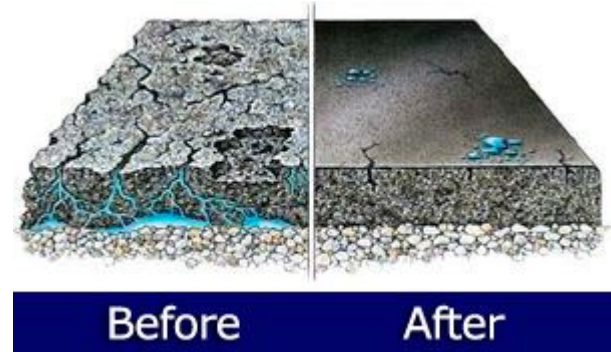
- A hydrophobic additive solution for filling potholes
  - Not the concrete or asphalt itself, a mixture with keratin from feathers that will be added to wet concrete/asphalt during mixing/pouring
- Created with keratin from chicken feathers.
- The keratin, a natural water repellent, keeps water from seeping beneath the surface and causing potholes.
- Solution is added to normal asphalt in proper dosages, then poured to fill pothole.



<p><b>Key Partners</b> </p> <ul style="list-style-type: none"> <li>Chicken farms across rural Alabama</li> <li>Pothole filling companies</li> </ul>	<p><b>Key Activities</b> </p> <ul style="list-style-type: none"> <li>Gathering chicken feathers</li> <li>Gathering raw materials</li> <li>Mixing solution</li> </ul>	<p><b>Value Propositions</b> </p> <ul style="list-style-type: none"> <li>Durability</li> <li>Fills potholes</li> <li>Comparable in price</li> <li>40 times more water resistant</li> <li>Saves money in long term</li> </ul>	<p><b>Customer Relationships</b> </p> <ul style="list-style-type: none"> <li>Get: market to road repair companies-cities</li> <li>Keep: potholes will still form due to normal asphalt roads</li> <li>Grow: use long term decrease in municipal road repair as marketing tool for other cities</li> </ul>	<p><b>Customer Segments</b> </p> <ul style="list-style-type: none"> <li>Local and/or state departments of transportation</li> <li>Road Repair contractors</li> <li>Ex. Shirley Concrete Co Inc, Sobcon Concrete Co Inc, East Alabama Paving Company, Inc</li> <li>Hardware Stores</li> <li>ACE Hardware, Home Depot, Lowes</li> <li>Individuals with asphalt driveways</li> <li>Individuals whose neighborhoods fail to patch roads</li> <li>Disaster relief/military in need of reliable roads</li> </ul>
<p><b>Cost Structure</b></p> <ul style="list-style-type: none"> <li>Raw materials cost <i>variable</i></li> <li>Acquisition of feathers <i>variable</i></li> <li>Production equipment and facilities <i>fixed</i></li> <li>Production cost of solution <i>variable</i></li> <li>Delivery <i>variable</i></li> <li>Marketing cost <i>Variable</i></li> <li>Cost Driven</li> </ul>	<p><b>Key Resources</b> </p> <ul style="list-style-type: none"> <li>Raw materials</li> <li>Chicken Feathers</li> <li>Manufacturing Facility</li> </ul>		<p><b>Channels</b> </p> <ul style="list-style-type: none"> <li>Awareness: direct marketing to cities or contractors</li> <li>Delivery: Direct shipping to customer</li> <li>Evaluation: US transportation office evaluation and standards will dictate quality</li> <li>Post-Sales Support: additional information and explanations for mixing techniques</li> </ul>	
<p><b>Cost Structure</b> </p>		<p><b>Revenue Streams</b></p> <ul style="list-style-type: none"> <li>Direct sale to customer segments</li> </ul> <p> <span style="color: black;">Week 1</span>   <span style="color: green;">Week 2</span>  <span style="color: red;">Week 3</span>  <span style="color: blue;">Week 4</span>  <span style="color: orange;">Week 5</span> </p>		

# Value Proposition

- Provide an alternative concrete solution to prevent water damage in roads and infrastructure with a minimal change in overall price and a repair will have a much longer lifespan than typical infrastructure repairs



<https://www.asphaltkingdom.com/best-driveway-sealer.html>

# Customer Segments - Niche Market

## Primary Customer Segments:

- Local governments
  - Specifically rural Alabama
- Road repair contractors

## Secondary Customer Segments:

- Military
- Disaster relief services
  - Useful for high risk, high value roads
- Hardware Stores

# Cost Structure

Product production and sale is cost-driven

- Based on our customer segments, we will attempt to minimize cost in production and delivery method to appeal to the low budget customers
- The product may not be as effective as it would be given better materials and more costly production, however, we feel as if this would cause the end price to be outside the acceptable range for the rural alabama customer segment

Fixed	Variable
Production equipment/facilities	Marketing cost Raw materials Chicken feathers Production cost Delivery

# Rural Populace Poll

- What condition are the roads that you most often drive on?
  - Great (1%)
  - Fine (30%)
  - Poor (69%)
- How affordable are your current taxes?
  - Very (0%)
  - Moderately (20%)
  - Hardly (75%)
  - I do not pay taxes (5%)
- Would you be willing to pay an additional tax to help with road repairs?
  - Yes (60%)
  - No (40%)

# Significant Interviews

## Jim Fischcorn- Civil Engineer AFCEESA/AFCAT (air force disaster relief)

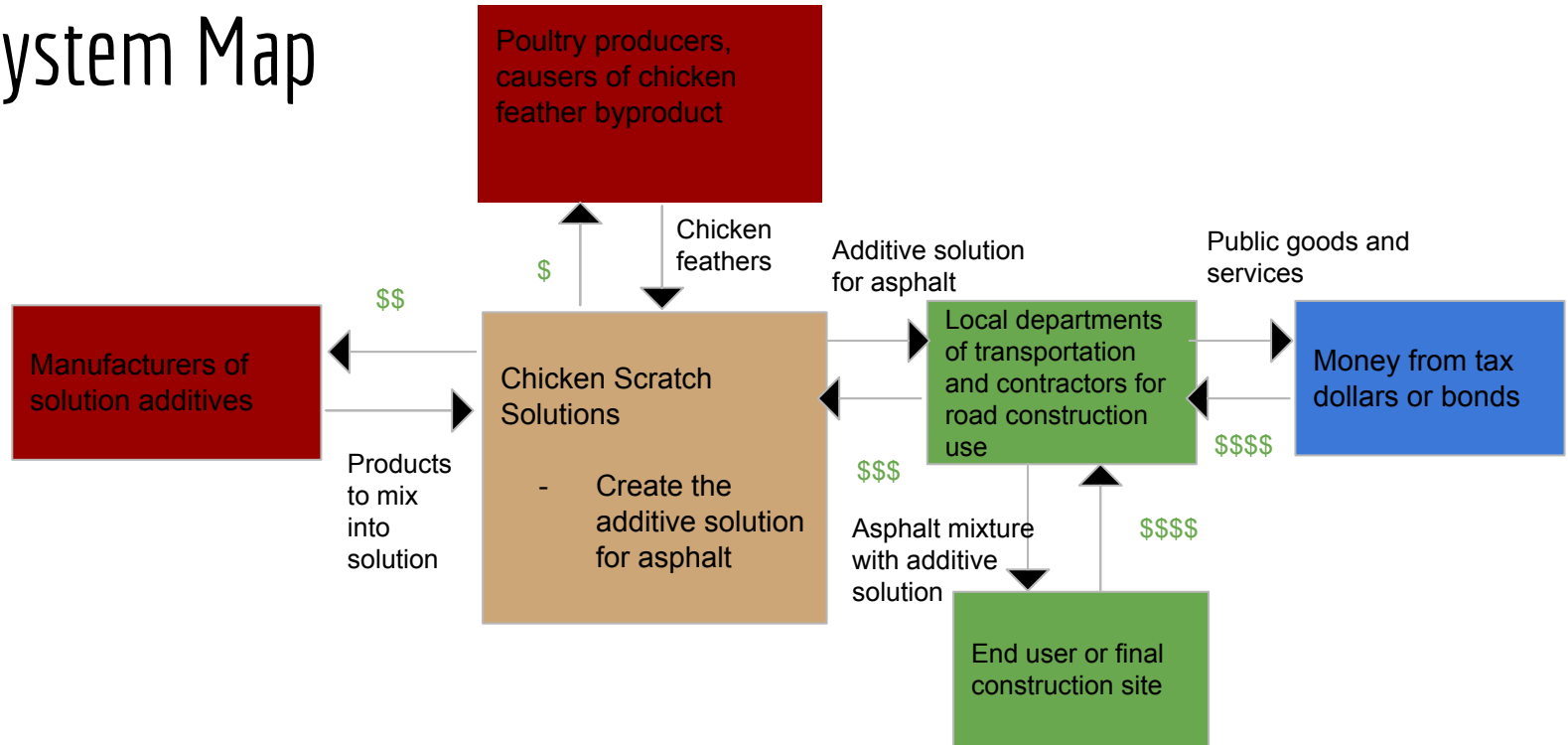
- Expressed interest in something that would reduce the amount of road washouts during storms. Said that the concept would help keep essential roads from closing after severe rains like those recently going through florida. He said that the cost of relief efforts would be much less if the responding personnel could reach the area by road rather than more roundabout means (airdrop, contracting ships to sail personnel in). Also said that the solution would be good to be used in emergency airfields like those needed in the pacific where, at times, the runways would degrade to unusable in a matter of days. The combination of sea-spray washing into the cracks and the shifting base would cause large crevasses in the runway.

## Rural Alabama Departments of Transportation Engineers

- “Sounds like a Billion Dollar Product” - John Bedford, Colbert County
- “We are always interested in products that save us time and money while also making our roads safer for the travelling public.” - Jake Bailey, Clarke County
- “ The issues we face is a product used only in pothole patching not having the durability and serviceability to justify the cost of the product and time spent applying this product.” - Tony Wearren



# Ecosystem Map



**?'s**