Roots Rising: Food Truck Feasibility Study

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Introduction

- Environmental Planning at Williams College
- Feasibility study of starting and operating a nonprofit food truck
- Environmental Benefits
- Social Benefits
Roots Rising Mission

● Youth development program designed to:
  ○ Put teens to work on farms, community kitchens & local food pantries
  ○ Provide educational workshops
    ■ Employability skills
    ■ Social-emotional learning skills
    ■ Healthy lifestyle choices
    ■ Social/agricultural issues
  ○ Learn essential life skills

● Belief in the transformational capacity of meaningful work.
  ○ Meaningful work - work that needs to be done
  ○ Contributes to a larger social good
  ○ Makes youth feel purposeful, capable, and connected
Social Issues &

- Teen Employment:
  - Responsibility
  - Time-management skills
  - Customer service
  - Developing business/marketing skills
  - Culinary skills
  - Leadership and teamwork experience

- Pittsfield, MA
  - Eliminating food deserts
  - Providing fresh, healthy food to locals
History of Farms & USDA Data

- USDA census:
  - 2007 to 2012 - the number of farms has decreased
  - Decrease evident in the Southeast and Midwest

- 1,921,058 small farms in the US in 2009
  - Translates to 90.1% of the total farms in the US at the time

- Small farmer - defined as one that grows & sells between $1,000-$250,000 per year in agricultural products
Local Farms & Sourcing: Benefits

- Use of local food is safe:
  - Known origin
  - Known farming practices
- Fresher food
- Learn about the region
- Education on farming practices
- Develop relationships with local farmers
- Limit the carbon footprint of food consumption
Case Study #1 - Kathy Lloyd & How We Roll

- Pittsfield, MA
- $80,000 investment from the time of a truck purchase to the grand opening of the business.
- Not enough foot traffic in the downtown Pittsfield area.
  - 3 hour lunch period = $100.
- Farmers markets and high-end events
Case Study #2 - Brian Cole & El Conejo Corredor

- Williamstown, MA
- $13,000 for a truck on Craigslist
- Facebook and Twitter for marketing (notify customers of daily location)
- Weekly gross sales totaled around $8,000
  - Yearly profits (after expenses) around $75,000-$80,000.
Case Study #3 - Oliver Martinez & The Night Truck

- Amherst, MA
- He did all of the labor, he only spent money on appliances
  - Craigslist and Ebay = $6,000-$8,000
- Sources his food from a local grocery store that obtains produce from local farms
  - Work with a local business rather than a big supplier
Photos from Oliver Martinez’s renovation of The Night Truck. From top to bottom, left to right: exterior of the night truck; 3-bay sink with separate handwashing sink; stovetop with four burners, blacktop, and oven, deep fryer to the right of the stove; truck’s main serving window, countertop, panini press, stove/oven, and storage plumbing system with hot water heater; electrical system.
Case Study #4 - Marcy Megarry & Nom Nom Hut

- Springfield, MA
- Designing the interior of a trailer to fit specific vendor needs and that much of the electrical and gas requirements depend on the food being served
- Ms. Megarry emphasized the use of advertising
  - small events, such as tastings
  - Facebook and Twitter
- Food truck owner must prepare excellent food
- Enter the business with a flexible plan.
Case Study #5 - Sarah Heusner & Fork in the Road

- Burlington, VT
- Culinary job training program for teenage students in the Burlington School District
- Custom trailer = $32,000.
  - Would have used a truck - trailer is difficult to move around
- Extend their same payment system to their kids for working on the food truck
Case Study #6 - Adam & Umami Bites

- Travel across the U.S. to different events
- Sources food from small businesses & farmers
- No guarantee of a return on this investment
  - Takes years to generate enough income to turn a profit
- 100+ hours per week and still can’t cut himself a paycheck
- Food trucks can be successful even when sourcing from local farms and small businesses
Case Study #7 - James Stark & Drive Change

- New York, NY
- Non-profit, provides a one year fellowship to ex-prisoners
  - Provide them the skills for employment.
- Truck provides ~20% of the companies income
- Run the truck 4 days per week
- Willing to host a visit for Roots Rising to show them a bit more about how they run their program
Meat Sourcing

Elmartin Farm*

<table>
<thead>
<tr>
<th>Item (Beef)</th>
<th>Price per lb.</th>
<th>Item (Pork)</th>
<th>Price per lb.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grd. Beef Patties</td>
<td>$7</td>
<td>Smoked Bacon</td>
<td>$10</td>
</tr>
<tr>
<td>Fresh Grd. Beef</td>
<td>$7</td>
<td>Smoked Ham</td>
<td>$4.25</td>
</tr>
<tr>
<td>London Broil Steak</td>
<td>$8</td>
<td>Nitrate Free Ham</td>
<td>$8</td>
</tr>
<tr>
<td>Top Round Stk.</td>
<td>$8.50</td>
<td>Center Cut Ham Slices</td>
<td>$4.75</td>
</tr>
<tr>
<td>Rib Eye Stk.</td>
<td>$13.25</td>
<td>Breakfast Sausage</td>
<td>$6.50</td>
</tr>
<tr>
<td>Porterhouse</td>
<td>$15.25</td>
<td>Sweet Sausage</td>
<td>$6.50</td>
</tr>
<tr>
<td>T Bone</td>
<td>$13.25</td>
<td>Hot Italian Sausage</td>
<td>$6.50</td>
</tr>
<tr>
<td>NY Sirloin Stk.</td>
<td>$15.25</td>
<td>Center Cut Pork Chops</td>
<td>$8.50</td>
</tr>
<tr>
<td>Rib Eye Boneless Stk.</td>
<td>$15.25</td>
<td>Country Style Pork Chops</td>
<td>$6.30</td>
</tr>
<tr>
<td>Sirloin Strip Stk.</td>
<td>$15.25</td>
<td>Regular Pork Spare Ribs</td>
<td>$6.50</td>
</tr>
<tr>
<td>Boneless Tenderloin Stk.</td>
<td>$18</td>
<td>Smoked Shoulder</td>
<td>$4.25</td>
</tr>
<tr>
<td>Face Rump Roast</td>
<td>$6.85</td>
<td>Fresh Shoulder</td>
<td>$4.25</td>
</tr>
<tr>
<td>Bottom Round Roast</td>
<td>$8</td>
<td>Pork Loin Roast</td>
<td>$8.50</td>
</tr>
<tr>
<td>Top Round Roast</td>
<td>$8.50</td>
<td>Pork Butt Roast</td>
<td>$6.50</td>
</tr>
<tr>
<td>Eye Round Roast</td>
<td>$9</td>
<td>Ground Pork</td>
<td>$6.50</td>
</tr>
</tbody>
</table>

Holiday Brook Farm

<table>
<thead>
<tr>
<th>Item</th>
<th>10 lbs.</th>
<th>20 lbs.</th>
<th>100 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Beef</td>
<td>$85</td>
<td>$160</td>
<td>$750</td>
</tr>
<tr>
<td>All Ground Beef</td>
<td>$130</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Elmartin Farm and Holiday Brook Farm are fictional examples for demonstration purposes.
Meat Sourcing - East Mountain Farm, Williamstown, MA

- Sweet Italian Links, Hot Italian Links - $10/pound retail (4 sausages per pound); Bratwurst - $11/pound retail
- 10-15% discount for wholesale
- Williamstown Farmers Market
  - $700 income
- Williamstown Holiday Market
  - $2000-$3000 income (not just sausage)
- Highly recommends cooked sausage truck
# Bread Sourcing

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baguette</td>
<td>$2.75</td>
<td>1 baguette (12 oz.)</td>
</tr>
<tr>
<td>Cheese &amp; Herb Mini Ciabattas</td>
<td>$8.00</td>
<td>6 pack (4 oz. each)</td>
</tr>
<tr>
<td>Jalapeno &amp; Cheese Mini Ciabattas</td>
<td>$8.00</td>
<td>6 pack (4 oz. each)</td>
</tr>
<tr>
<td>Olive &amp; Rosemary Mini Ciabattas</td>
<td>$8.00</td>
<td>6 pack (4 oz. each)</td>
</tr>
<tr>
<td>Plain Mini Ciabattas</td>
<td>$6.00</td>
<td>6 pack (4 oz. each)</td>
</tr>
<tr>
<td>Potato Onion</td>
<td>$4.25</td>
<td>1 loaf (16 oz. boule)</td>
</tr>
</tbody>
</table>
# Vegetable Sourcing

## MARTY'S Local

<table>
<thead>
<tr>
<th>Produce</th>
<th>Cost</th>
</tr>
</thead>
</table>
| **Peppers** (Green and Red) | Green: $32 (20 lbs.) Organic  
                           | Green: $20 (1 1/9 bushel) IPM  
                           | Red Bull’s Horn: $42.50 (20 lbs.) Organic  
                           | Red Bell: $31.50 (1 1/9 bushel) IPM |
| **White Onion**       | Yellow Sweet (40 lbs.) $37.50 Organic  
                           | White (50 lbs.) $72 Organic  
                           | Walla Walla (20 lbs.) $42.50 |
| **Mushroom**          | Shiitake $9.65 / pound                   |
| **Sauerkraut**        | $185 (5 gallons)                        |
| **Carrots**           | $31.50 (25 lbs.) Organic                 |
| **Tomatoes**          | $38.50 (20 lbs.) Organic  
                           | $25 (20 lbs.) IPM              |
| **Spring Mix Lettuce**| $36 (6 lbs.)                             |
| **Cucumber**          | $27.50 1 1/9 bushel (~40 lbs.) IPM       |
| **Cheddar Cheese**    | On average, $12 - $13 per pound for local cheese. The cheddar that we sell is a clothbound cheddar at $16 per pound. It’s not the best choice for a food truck in terms of cost but it’s a darn good cheese. |
| **Goat Cheese**       |                                          |
| **Pepper Jack Cheese**|                                          |
| **Garlic**            | $6.50-$9.50 / pound                       |
Farmers Markets & Local Events

- Focus on the summer for Roots Rising’s first season.
- Provides students ample time to learn the processes/work that go into mass-cooking, maintaining, and operating a food truck.
- Food trucks are generally more popular during the summer months
- Next are potential venues for Roots Rising’s, includes:
  - Vendor fees
  - Potential income
Farmers Markets: Williamstown

- When: May-October on Saturdays, 9am-1pm
- Permits & Vendor Fees:
  - Seasonal - $150
  - Per event - $20
  - Processed Food Permit - $30 fee
- Steering Committee decides which vendor are permitted
- Potential Income: $600-$700
Farmers Markets: Pittsfield

- When: May-September on Saturdays, 9am-1pm
- Vendor Fees: *waived*
- Potential Income: $400-700 (depending on weather) at $3 per egg roll.
Third Thursdays

- When: 3rd Thursday in June-August, 11am-1pm
- Where: Pittsfield, MA
- Vendor Fee: *waived*
- Potential Income: Similar to Pittsfield Farmers Market
Pittsfield Suns Food Truck Festival

- When: End of May
- Where: Pittsfield, MA
- Vendor fee: $175
- Attendees: ~1500
- Interested in a wide range of vendors
- Vendors “VERY pleased with their day”
- Contact: Brian Flagg, Brian@pittfieldsuns.com, (413)445-7867
Mass MoCA Events - Fresh Grass & Solid Sound

- Solid Sound: June 2018
- Fresh Grass: September 2018
- Where: North Adams, MA
- Vendor fee: *Potentially waived with Mass MoCA connections*
- Potential Income: $3000-4000 at $4 per egg roll
Startup Options & Costs

- **Option 1**: Fully operating food truck with food prepared onsite
  - All the capabilities of a commercial kitchen
  - No prior food preparation required
- **Option 2**: Some cooking capabilities, mostly warming
  - Majority of the food prepared and cooked offsite
  - Loaded onto the truck, kept warm, prepared to order
<table>
<thead>
<tr>
<th>Item</th>
<th><strong>Option 1</strong>: Food Truck with food prepared onsite</th>
<th><strong>Option 2</strong>: Food Truck with food prepared offsite (all truck info based off of Mezze truck)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Truck</td>
<td>$25,000-$30,000</td>
<td>$13,000-$15,000 (Mezze asking price)</td>
</tr>
<tr>
<td>Food Trailer</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>External design</td>
<td>$3000-$6000</td>
<td>Up to personal discretion</td>
</tr>
<tr>
<td>Electrical &amp; Plumbing</td>
<td>$3000-$5000</td>
<td>Installed (propane and generators)</td>
</tr>
<tr>
<td>Water Tanks</td>
<td>$1,000</td>
<td>Installed</td>
</tr>
<tr>
<td>Sinks</td>
<td>&lt;$200</td>
<td>Installed</td>
</tr>
<tr>
<td>Refrigerator/Freezer</td>
<td>$100-$200</td>
<td>Installed</td>
</tr>
<tr>
<td>Panini Press</td>
<td>$100-$400</td>
<td>$100-$400</td>
</tr>
<tr>
<td>Stovetop with oven</td>
<td>$20,000</td>
<td>included</td>
</tr>
<tr>
<td>Commercial Kitchen Rent</td>
<td>N/A</td>
<td>$35/Day $250/Month (Shire City Sanctuary, Pittsfield)</td>
</tr>
<tr>
<td>Board of Health</td>
<td>~$100</td>
<td>~$100</td>
</tr>
<tr>
<td>Fire Department</td>
<td>$100 (Transportation of combustible liquids),</td>
<td>$100 (Transportation of combustible liquids), $75-$225 (Propane storage permit and inspection)</td>
</tr>
<tr>
<td></td>
<td>$75-$225 (Propane storage permit and inspection) etc.</td>
<td>etc.</td>
</tr>
<tr>
<td>Event Vendor Fee</td>
<td>~$125 per event (average slot cost)</td>
<td>~$125 per event (average slot cost)</td>
</tr>
<tr>
<td>LLC</td>
<td>~$500</td>
<td>~$500</td>
</tr>
<tr>
<td>SafeServ</td>
<td>$125 (manager), $36 (vouchers), $150, $100</td>
<td>$125 (manager), $36 (vouchers), $150, $100 (handler),</td>
</tr>
<tr>
<td></td>
<td>(handler)</td>
<td></td>
</tr>
<tr>
<td>Allergen Awareness</td>
<td>~$15-$22</td>
<td>~$15-$22</td>
</tr>
<tr>
<td>Sales Tax</td>
<td>6.25%</td>
<td>6.25%</td>
</tr>
<tr>
<td>Insurance</td>
<td>Current Insurance Rate (?)</td>
<td>Current Insurance Rate (?)</td>
</tr>
<tr>
<td><strong>Total Approximate Cost</strong></td>
<td><strong>$54,000-$64,000 plus vendor fee costs</strong></td>
<td><strong>$14,800-$16,800 plus vendor fee costs</strong></td>
</tr>
</tbody>
</table>
## Income Analysis

<table>
<thead>
<tr>
<th>Season #Event Breakdown</th>
<th>Farmers Markets (100 meals at $6 per meal)</th>
<th>Special Events (1000 meals at $6 per meal)</th>
<th>Total/Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Season One - 12 Farmers Markets 4 Special Events</td>
<td>$7,200</td>
<td>$24,000</td>
<td>$31,200</td>
</tr>
<tr>
<td>Season Two - 12 Farmers Markets 6 Special Events</td>
<td>$7,200</td>
<td>$36,000</td>
<td>$43,200</td>
</tr>
<tr>
<td>Season Three - 16 Farmers Markets 6 Special Events</td>
<td>$9,600</td>
<td>$36,000</td>
<td>$45,600</td>
</tr>
<tr>
<td>Total</td>
<td>$24,000</td>
<td>$96,000</td>
<td>$120,000</td>
</tr>
</tbody>
</table>
Feasibility Analysis & Recommendations

- Start small and slow
  - Focus on summer season and build from there
- Create a consistent schedule of vending locations
  - Social media and marketing
- Limit startup costs
  - Mezze’s food truck
  - Utilize connections
- Do not alter or complicate the menu; perfect it!
- Do not expect huge margin on profits immediately
Acknowledgements

Special Thanks To:
Sarah Gardner, Jess Vecchia, Jamie Samowitz, Interviewees, & Classmates