Background
Urban Food Deserts
• Low access - Greater than 33% of the population live more than 1 mile from a supermarket
• Low income – Poverty rate greater than 20%
• Unhealthy options

Worcester Food Desert

Problem
Urban Food Desert in Worcester
• Area of 0.5 square miles Population: 5248
• Percentage of Low Access: 100%
• Percentage of Low Income: 30.4%
• Percentage of households without vehicles: 29.4%

Solution
Renovate an existing foreclosed house (26 Windsor St, Worcester MA) to support an aquaponics system.

The Aquaponics Cycle
616 Fish Week
Worms
Plants
5520 Plants Week

Financial Model

Cost
• Acquisition of a house and building permits
• Large set up cost
• Training and education
• Possibility for technological or biological failures

Benefits
• Efficient yield
• Minimum inputs
• Small production costs
• Subsidies costs through government grant
• Access for community
• Steady reliable source of protein and produce
• Jobs

Assessment
• Calculate new “low access levels”
• Membership

References