



# Jobenomics Urban Agriculture Program

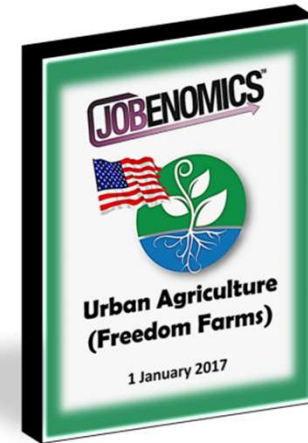


**Chuck Vollmer**  
**15 May 2019**

# Jobenomics Urban Agriculture



- **Team:** Jobenomics is teamed with ACTS Freedom Farms of America.
- **Mission:** Provide a solution to food shortage through self-sustaining and supportive live-work communities.
- **Vision:** Provide quality foods in harmony with the global environment, while empowering individuals to become an important partner in high-tech controlled environment agriculture.
- **Strategy:** 1) home ownership combined with an agriculture career, 2) corporate owned indoor commercial growing operations and 3) train "high-tech controlled environmental agricultural farmers."



ACTS



**Goal: Establish 25,000 new jobs within grow centers, and another 25,000 ancillary jobs.**

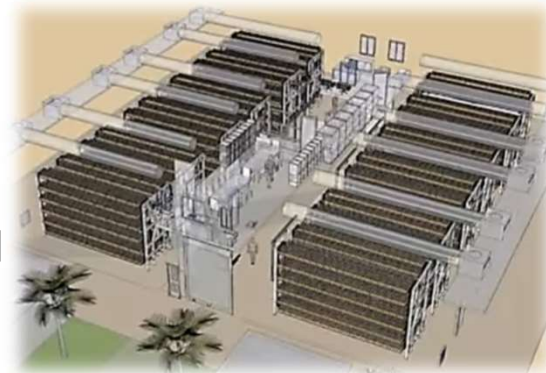
# Jobenomics WDC Urban Farming



- Initial cadre will be mostly veterans (vetting and financing considerations) but will also include non-veterans.



**Converted  
Warehouse  
With Controlled  
Environment & Vertical  
Farming Systems**



- AG Core is the corporate team that manages and trains new recruits until they are capable of assuming the responsibility to run entire operation.
- Each micro-farm will consist of the land and a leased greenhouse that will be equipped and supplied by AG Core.



**Secure Produce On  
Demand (POD)  
Greenhouse**

**GAP, GHP, FSMA  
Compliant Greenhouse**



**Base earnings will be \$35,000 to \$40,000 annually with bonuses and profit sharing upon completion of first year.**



# Produce On Demand (POD) System

## Off-Grid Configuration



A POD is for growing.  
Processing and packaging will  
be either conducted in the  
POD or secondary sites.

100kW Solar Array

Modular  
Growing Facility

EV Refrigerated  
Truck & Charging Station

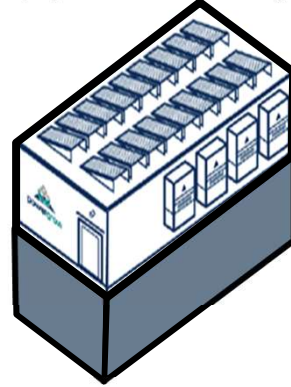
HVAC/Power  
& 20kW  
Storage Station

Produce will be harvested every 30-60-90 days depending on crops.

# Live/Work/Office Units

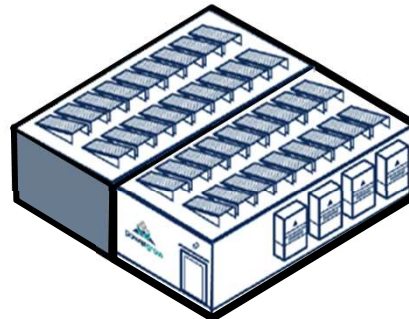
- **Affordable Multiuse Configurations:** Home, farm, office.
- **Livable:** from 1,000sf single family to 3,000sf multi-family.
- **Environmental:** LEED certified, insulated, mold resistant, solar
- **Suitable for small lots (1/8 acre) & spaces:**

## Vertical Configuration (up to 3 stories)



## Horizontal Configuration (Attached or Detached Units)

(Attached or Detached Units)



## Modular/Portable



## Proven



(TV Star Rick Harrison's Pawn Plaza in Las Vegas was built with the same manufactured modules as a POD)

**Micro Farmer will be part of a Local LLC  
with profit sharing amongst all team members.**



# Affordable Local Businesses



- **Year End Cash Balance:** Year 1 = \$350,000, Year 2 = \$650,000.
- **Indoors versus Outdoors:** 5-acre comparison: Indoor is 18-times more productive, Indoor generates 50% more revenue, Indoor EBIT is 434% higher than outdoor agriculture.

*Earnings Before Interest & Taxes*

**Significantly more efficient and cost effective than outdoor farming.**

# High \$ Value CEA Products

## Common Crops

- Culinary Herbs
- Lettuce
- Spinach
- Tomatoes
- Strawberries
- Peppers
- Cucumbers



## Specialty Crops

- Medicinal Herbs
- Flowers
- Mushrooms
- Ground Covers
- Ornamental Grasses
- Bamboo
- Hemp

**The highest value crop is hemp. Cultivating hemp for CBD oil can generate as high as \$75,000 per acre in controlled conditions.**



# Live/Work Eco-Communities



**Opportunity Zone Fund financing available.**



# Live/Work/Play/Retire Complex



**Safe Rooftop  
Playground &  
Community Area**

**Expandable Agra  
Business  
(Up To 1 Acre)  
For Maximum  
Employment**

**Easily Installed  
& Tailorable  
Modular  
Construction**

**Meets District's desire for affordable homes, safe communities, green eco-friendly facilities, and business/employment initiatives.**

# Ideal For DPR Community Gardens

*Department of Parks & Recreation*



## ■ Ward 5

- **Harry Thomas Gardens** | 1743 Lincoln Road, NE
- **Langdon Youth & Community Garden** | Franklin & Mills Avenue, NE
- **Arboretum Youth Garden** | 2412 Rand Place, NE
- **Edgewood Gardens** | 300 Evarts Street, NE
- **Ledroit Gardens** | 3rd & V Streets, NW | 56 plots
- **Noyes Gardens** | 10th & Franklin Streets, NE | 7 plots



## ■ Ward 7

- **Benning Garden** | Fable Street & Southern Avenue, SE
- **Hillcrest Garden** | 3100 Denver Street, SE
- **Lederer Garden** | 4801 Nannie H. Burroughs Avenue, NE
- **Soilful City Garden** | 53rd & Dix Street, NE



## ■ Ward 8

- **Douglass Garden** | 1898 Stanton Terrace, SE
- **Ferebee Hope Community Garden** | 3999 8th Street, SE
- **Fort Greble Garden** | Martin Luther King Jr. & Elmira Street, SW
- **Fort Stanton Community Garden** | 1812 Erie Street, SE
- **Mothers Peace Garden** | Mississippi Avenue & 13th Street, SE



**Ideal Public-Private Partnerships**



# Upgrades For Private Agra Businesses



## An Urban Agriculture Enterprise Run by D.C. Returning Citizens Fights to Grow

*Hustlerz 2 Harvesters is based in Ward 7's Dix Street Garden.*

BY LAURA HAYES, ANDREW GIAMBRONE — NOV 10, 2017 4 PM



[hustlaz2harvesters.com](http://hustlaz2harvesters.com)



Boe Luther

Wallace Kirby

### Certified Urban Community Gardeners

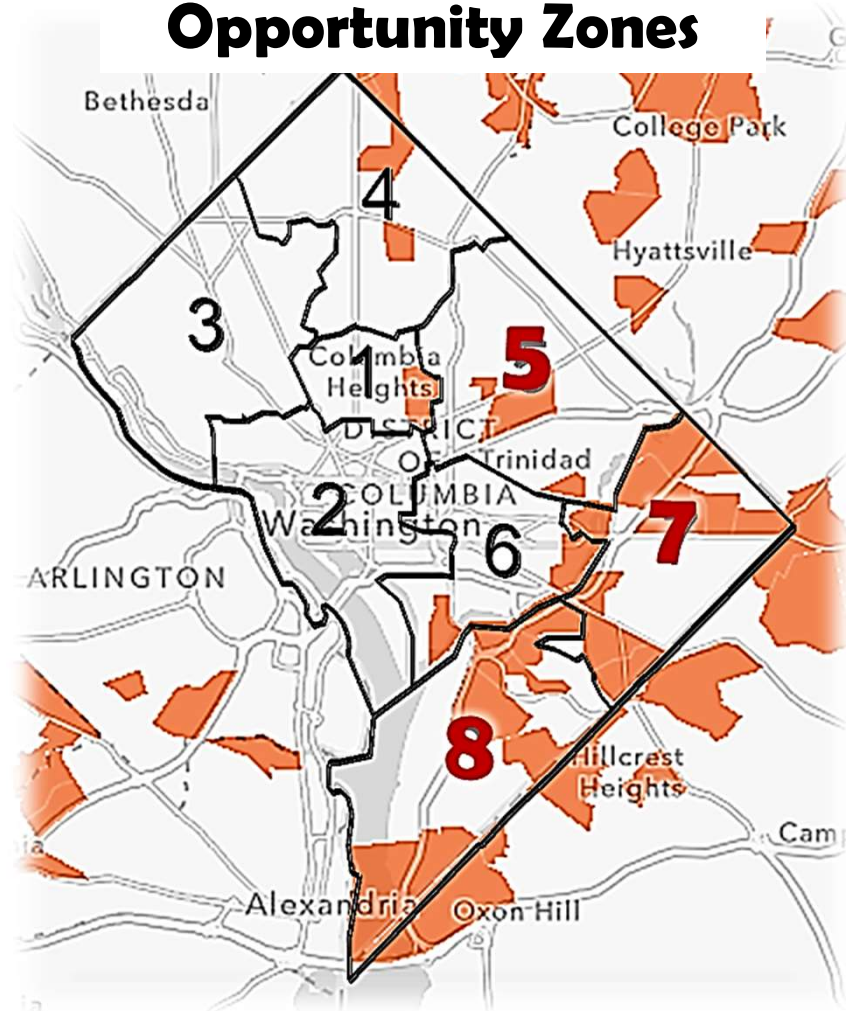
- Garden Carpentry Certification Course
- Hoop Houses
- Sustainable Permaculture Design Certificate Course
- Aquaponics & Hydroponics Technician Certification
- Certified Professional Food Manager, Handling and Food Systems

**Hustlaz 2 Harvesters interested in partnering with JWDC.**

# Funding Sources

- Opportunity Funds
- HUD, SBA, VA and CDFI startup business loans
- Equity investments
- Corporate partnerships
- Government and foundation grants
- Profit sharing
- Investment partners

## Washington DC Opportunity Zones



Ultimate goal is start our own JWDC Opportunity Fund.



# Produce On Demand Launch Model



# Vision

## Structured Program Launch Built To Scale

- Start growing in a **Produce On Demand** facility that can be expanded into larger grow facilities and areas:
  - 3-5 employees in Year 1 with a POD 48'W x 48'L x 11'H
  - 20 – 30 employees in Year 2 with addition of greenhouses or POD expansion
  - 150 employees by Years 4/5 with full master plan
- Up to 100% equipment financing with appropriate credit rating
- Start with specialty crops and expand to greenhouses
- Create permanent career paths and business ownership



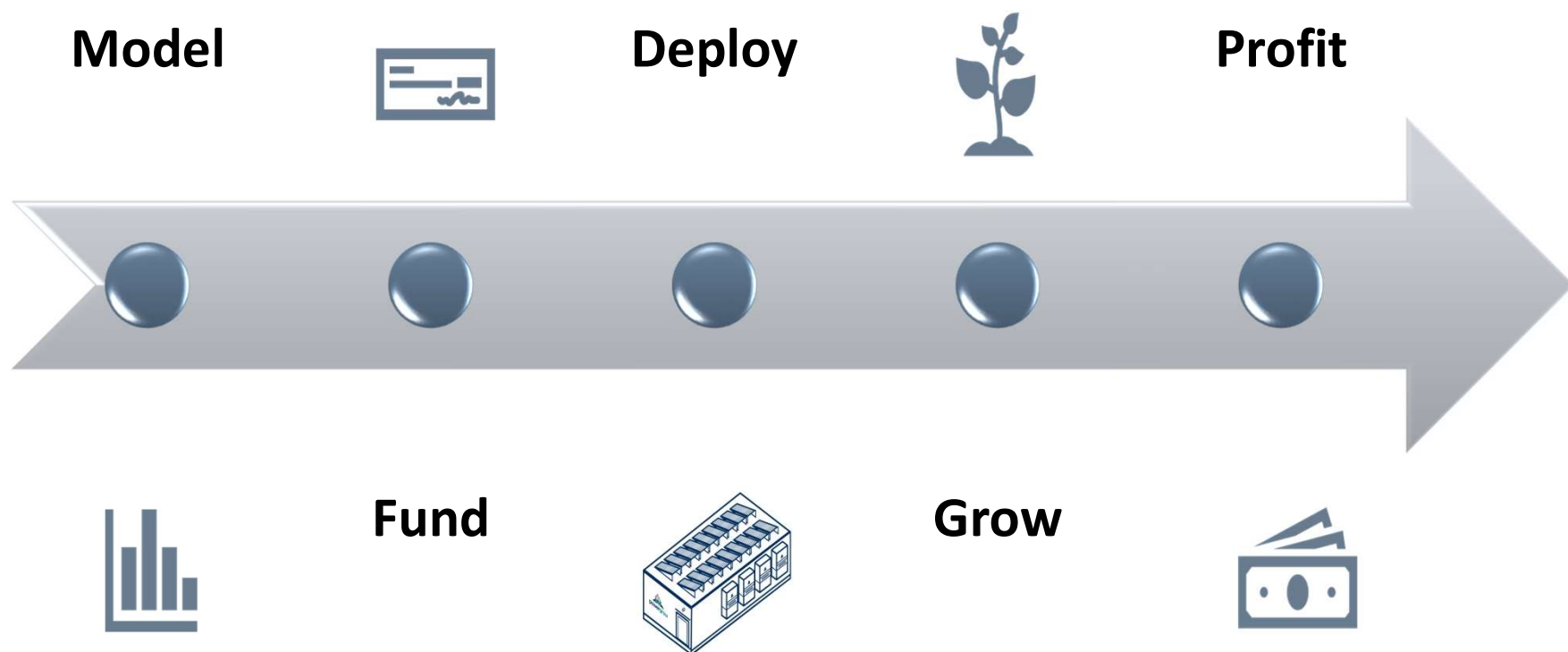
# Model

## Local Ownership With National Support

- Local ACTS FFA LLC manages POD growing operations with support from Corporate, partners and suppliers
- Local ACTS FFA LLC secures \$300,000 in operating capital
- Structured support managed by ACTS FFA Corporate and PowerGrow
  - Funding: 100% equipment financing for POD Grower Training Food Quality: GAP, GHP & FSMA and Organic Certification from FSA Farm Service Administration
  - Marketing & Sales support: revenue stream for ACTS Corporate
  - Veteran Support (USDA & VA)
- Sell direct to retail grocers, farmers markets, food service restaurants, hotels, etc, universities and other buyers

# Process

Fast Track To Launch And Profitability



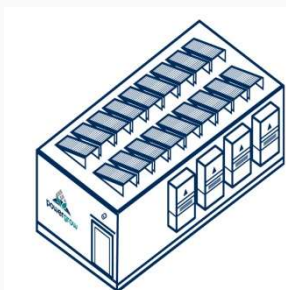
**120 days for delivery and setup under Fast Track.**



# Scaling Into Local Markets

Launch – Expand – Scale

## POD LAUNCH

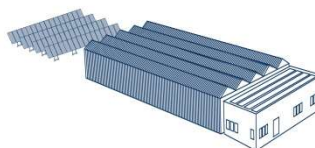


**Growing Crops and  
Generating Revenue in  
60 to 90 Days**

**3-5 Direct Jobs**

**YEAR 1**

## 1 ACRE POD EXPANSION or 1 TO 5 ACRE GREENHOUSE

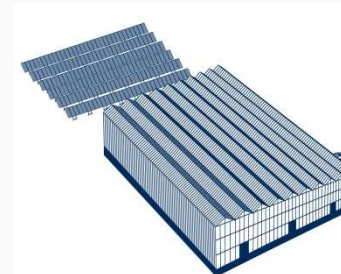


**Expandable Footprint  
for Market Expansion  
and Multiple Crops**

**20-30 Direct Jobs**

**YEAR 2**

## 5 TO 15 ACRE GREENHOUSES



**Maximizes Economies  
of Sale, Revenue  
and Profits**

**150 Direct Jobs**

**YEARS 3 - 5**

**10-50 PODs Located  
throughout The District of Columbia**

**1-3 Locations  
In DC-MD-VA Metro**

# Modular Fast Launch Strategy

Produce first crops 30-60 days following set up of POD

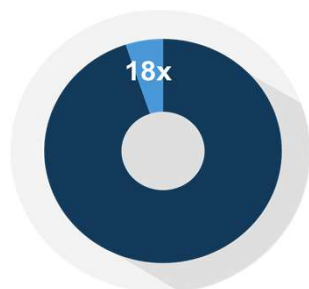


- ✓ Fast Ramp: Revenue & Profit in Year 1
- ✓ Remote monitoring and management
- ✓ Mitigates grower performance risk
- ✓ Long-term facility flexibility

**Growing operations begin 120 days after lease approval and ordering of the capital improvements.**

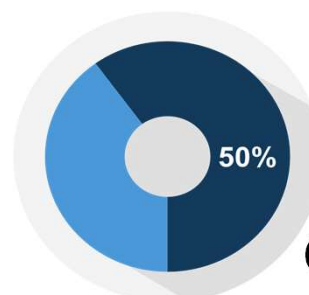
# 5-Acre Greenhouse

Large Scale Jobs Engine



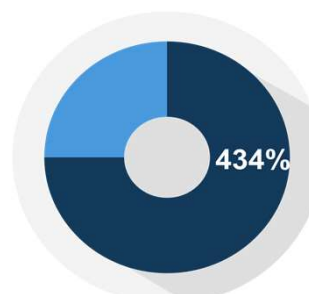
## Acre Comparison

Indoor: 5  
Outdoor: 93



## Revenue Comparison

Indoor: \$3,389,829  
Outdoor: \$2,259,886



## EBIT Comparison

Indoor: \$874,822  
Outdoors: \$201,322

Performance Categories	5 Acre High-Tech Greenhouse Grape Tomatoes
Acreage Under Glass	5
Growing Area (% actually planted)	95%
Growing Area in Square Footage	206,910
Yield per Square Foot	0.71
Total Yield per planting	146,906
Number of Plantings per year	10
Waste factor for transport and processing	94%
Estimated Yield to Market:	1,377,979
Estimated Market Price Per Pound	\$2.46
Estimated Gross Revenue	\$ 3,389,829
Cost of Labor, Seed, Water, Chemicals/Fertilizer	\$ 1,394,573
Cost of Lease and Power	\$ 1,046,980
Total Cost to Grow	\$ 2,441,553
Net income before shipping:	\$ 948,275
Cost of Shipping	\$ 73,453
<b>EBIT</b>	<b>\$ 874,822</b>

**Significantly more efficient and cost effective than outdoor farming.**



# Support Programs

Federal, State, Local & National Team



## ■ Financial

- Land Acquisition, POD & Equipment Funding, Operating Capital

## ■ Operational

- Food Safety: GAP, GHP, FSMA
- Organic Certification
- Staff Augmentation with Subject Matter Experts

## ■ Sales & Marketing

- National Retail Produce Off-Taker Programs

## ■ Growing Expertise

- Upstart University, U of A CEAC, Master Grower Services
- ACTS FFA extensive training ongoing.
- Local Universities and colleges will utilize PODs as remote training centers for students.

# ACTS FFA Management Team



Business Innovation, Analytics, Fulfillment And Business Economics Experts



**Michael Buehler**

CEO & President  
Business  
Innovation



**Bill O'Connor**

Chief Analytics  
Officer  
Project Financing  
Expert



**Robert Flegal**

Chief Operating  
Officer  
Fulfillment Expert



**Chuck Vollmer**

Chief Development  
Officer  
Business & Economics  
Expert



**ACTS Freedom Farms Advisory Board Members include  
controlled environment agriculture and fertigation experts.**

# PowerGrow Management Team



Agricultural Technology, Construction, Energy and Finance Experts



**Sean Lyle**

CEO & President  
25 Years IT &  
Energy



**Gerald Williams**

Chief  
Development  
Officer  
Project Financing  
Expert



**Andy Lloyd**

Chief Operating  
Officer  
25 Years High-Tech  
Construction



**John Wellman**

Chief Innovation  
Officer  
Energy Systems  
Expert



**PowerGrow Advisory Board Members include two of the  
leading greenhouse plant scientists in the country**



## **Contact Information**

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