

***Jobenomics*** deals with the process of creating and mass-producing small businesses and jobs.



***Jobenomics SMRDI***'s goal is to facilitate creation of thousands new business and jobs over the next 5-years in the 4-county San Marcos region.

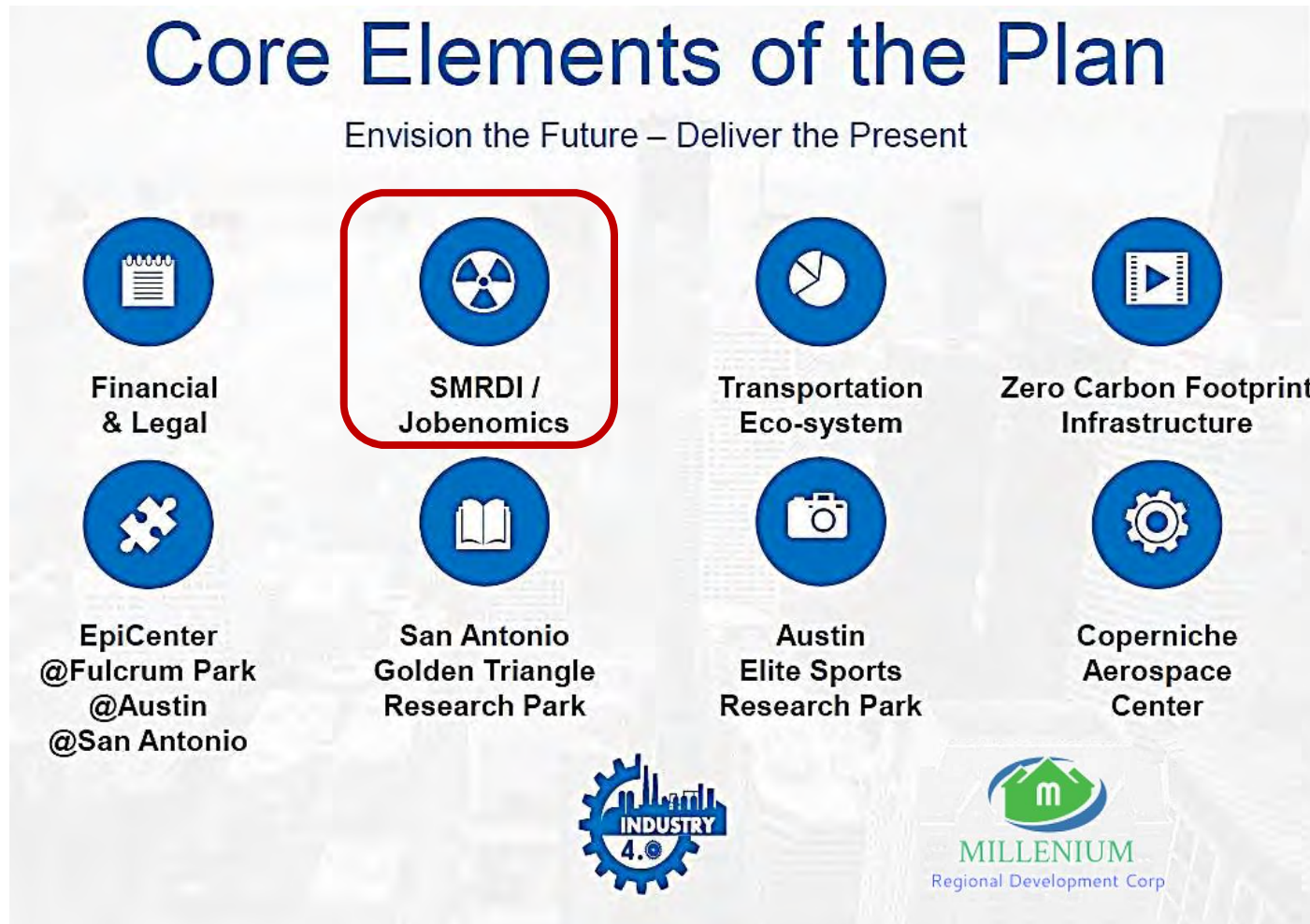
25 April 2018

# Millennium Regional Development Corp San Antonio – Austin (TX) Metroplex Project



Jobenomics is teamed with MRDC to develop a 42,000 acre project to create the next generation of entrepreneur driven micro-economies.

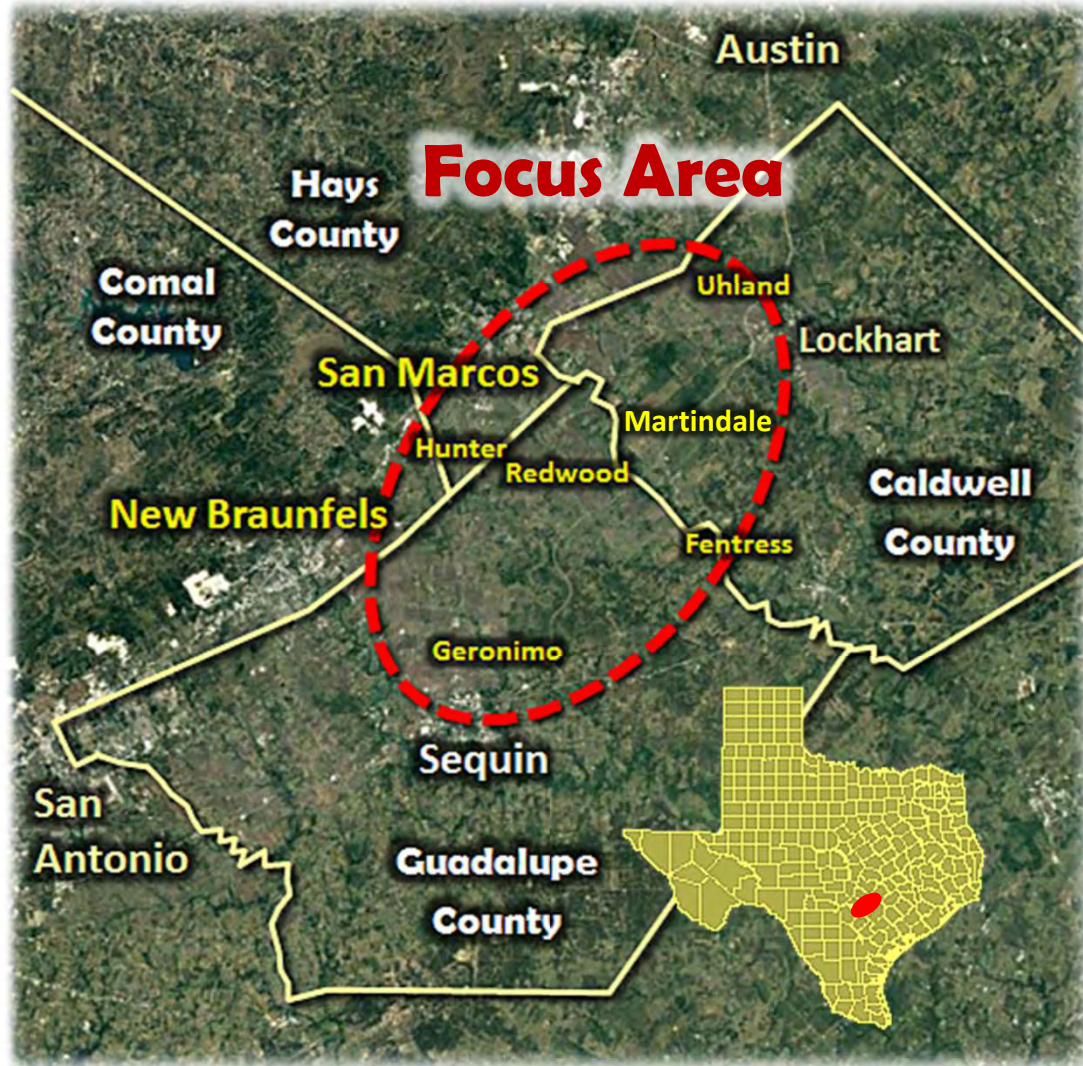
# Jobenomics Programs Focus On Serving Under-Resourced Urban and Rural Areas



**MRDC is a master developer engaged in creating and delivering sustainable inter-regional growth without the sprawl and infrastructure problems of the industrial era.**



# San Marcos Regional Development Initiative (SMRDI)



**Focus Area  $\approx$  42K Acres**

- **Urban:** Austin San Antonio Corridor (I-35) Communities
- **Rural:** Guadalupe & Caldwell Counties
- **Opportunity Zones:** Capital gains tax deductions for investment in under-resourced communities

## **SMRDI Opportunity Zones**



**SMRDI deals with the process of creating and mass-producing next generation businesses and jobs in urban and rural communities.**

# SMRDI Demographic, Economic & Employment Snapshot



Geography	Population	Jobs (Employees)	%	Median Household Income	Median Property Value	Poverty Rate	Minority Population
USA	326M	148M	45%	\$60,336	\$217,600	13.4%	39.6%
Texas	28.3M	12.5M	44%	\$59,206	\$172,200	16.0%	58.1%
Austin-Round Rock MSA	2.12M	1.13M	53%	\$73,800	\$283,600	12.3%	48.0%
San Antonio-New Braunfels MSA	2.47M	1.13M	46%	\$56,774	\$170,100	15.2%	66.4%
San Marcos Region	Guadalupe County	150,889	47%	\$66,187	\$175,000	10.6%	48.6%
	Caldwell County	40,544	45%	\$51,346	\$124,300	17.7%	58.9%
	San Marcos	59,935	53%	\$34,748	\$34,748	34.7%	51.3%
	Redwood	4,239	53%	\$48,082	\$60,100	19.2%	89.4%
	Uhland	1,233	45%	\$44,659	\$118,200	14.0%	79.3%
	Geronimo	937	65%	\$64,963	\$60,000	8.2%	48.3%
	Hays County OZone	8,363	47%	\$27,468	NA	40.0%	NA
	Caldwell County Ozone 1	8,451	8%	\$44,772	NA	16.0%	NA
	Caldwell County Ozone 2	3,978	35%	\$35,562	NA	19.0%	NA

High  Low 

Economic, Demographic Data (Source: DATA USA 2017 based on Census Bureau ACS1-Year Estimate Data)

Opportunity Zones in San Marcos Region (Source: ESRI 2017 based on Census Bureau ACS 2012-2016 Data)

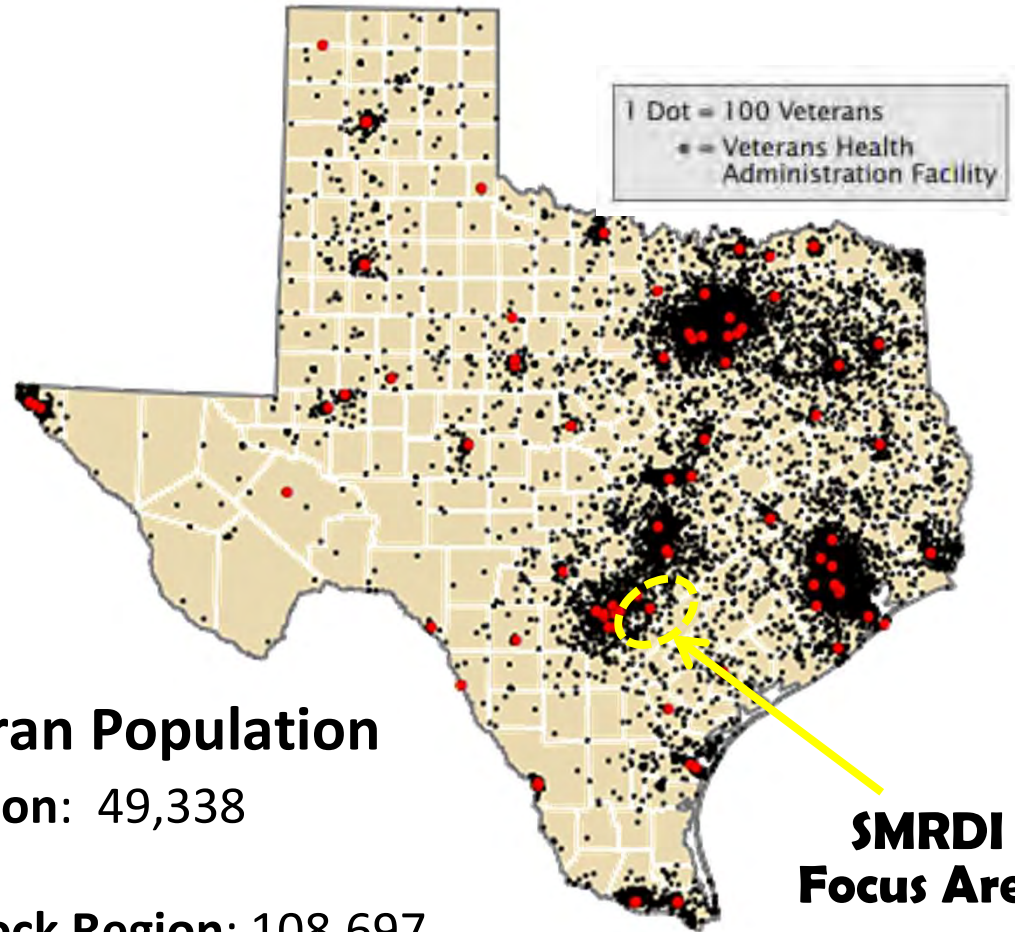
**The San Marcos Region is economically underserved and would benefit greatly from a major business and job creation program.**



# Veterans Population

## Texas Veterans

- **Population:** 1,583,272
- **Businesses:** 215,217
- **Homeless:** 2,718
- **VA Facilities:** 88
- **Age Distribution**
  - ✓ 18 to 54: 41%
  - ✓ 55 to 64: 23%
  - ✓ 65 and older: 36%



## SMRDI Focus Area Veteran Population

- **4-County San Marcos Region:** 49,338  
(Caldwell, Comal, Hays, Guadalupe)
- **5-County Austin-Round Rock Region:** 108,697
- **8-County San Antonio-New Braunfels Region:** 192,621

**The 17-counties in and around the SMRDI focus area has 483,918 veterans—one of the highest concentrations in the United States.**

## **Suggested Jobenomics SMRDI Proof-of-Concept Programs**

- Controlled Environment Indoor Agriculture
- Urban Mining/Advanced Materials Reclamation
- Direct-Care/Remote-Care/On-Demand Care
- Digital Economy Jobs & Digital Academies
- Renewable Energy & Energy Services
- Business Generators & E-Clubs

**Jobenomics National Grassroots Movement**  
focus is on mass-producing small businesses and jobs.



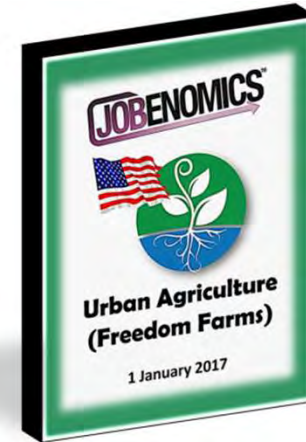
# **Controlled Environment Agriculture (CEA) Program**

**For Under-Resourced Urban & Rural Communities**



# Controlled Environment 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, enabling individuals to become partners 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 SMRDI **Rural** Controlled Environment Agriculture Program



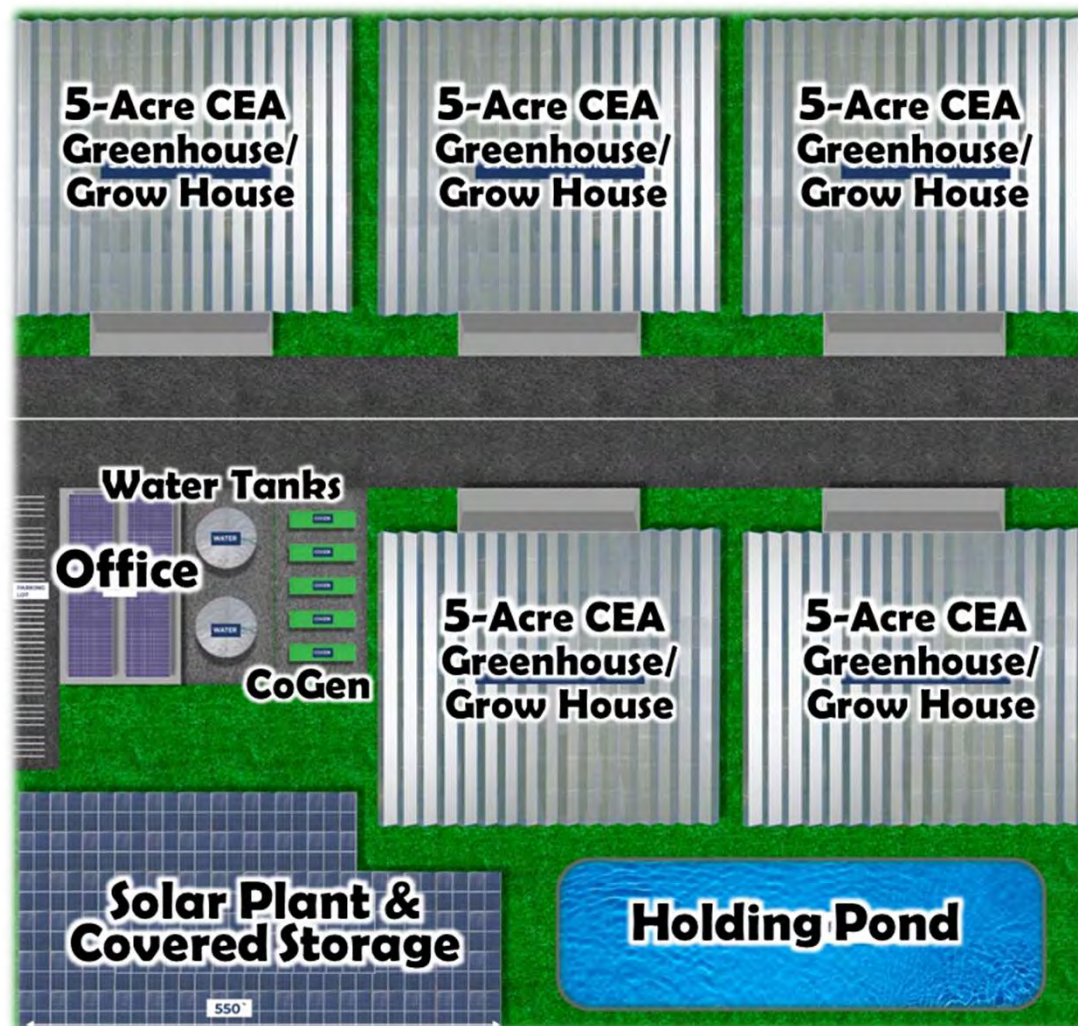
Designed by ACTSFFA/Oculus for veteran-owned businesses and homes in California.



**1200 acre, 22.6 million sq. ft. of indoor controlled environment agriculture, greenhouse village, hotel, farmers market, winery, production and distribution facilities, commercial and community centers, and 300 single-family homes**



# 50-Acre Controlled Environment Agriculture (CEA) System Rendering



The Jobenomics/ACTSFFA/Grow team is working with leading greenhouse, grow-house and CEA vertical and hydroponic suppliers.



# 1-5 Acre CEA Project



**Jobenomics/ACTSFFA are currently pursuing 1-5 acre CEA pilot projects in Iowa, Washington DC, Baltimore, Chicago, Erie PA, Montgomery County MD, San Marcos TX, Las Vegas and Alberta Canada.**

# Live/Work Eco-Communities



**Opportunity Zone Fund financing available.**



# Jobenomics SMRDI **Urban** Controlled Environment Agriculture Program



**Goal is to create a dozen indoor-grow businesses in SMRDI within the next 5-years in under-served communities.**



# 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.

# Hemp Products



**Body-Care Products**



**CBD Oil**



**Food Supplements**



**Apparel**



**Fertilizer**



**Capacitors**



**Biofuels**



**Paper**



**Rope**



**Hempcrete**

**The hemp-related product market is estimated to exceed, by a large margin, the marijuana market over the next decade.**

# Cannabis

Same Species With Different Chemical Compounds And Applications

## Hemp

*Cannabis Sativa*



## Marijuana

*Cannabis Indica & Sativa*

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>■ <b>Legal</b> (2018 U.S. Farm Bill)</li> <li>■ Usage: agricultural, industrial, medical &amp; pharmaceutical</li> <li>■ Primary compound: <b>CBD</b> (Cannabidiol) grown for its non psychoactive properties</li> <li>■ Main markets: medical, body-care, nutritional, construction materials, fibers, animal food</li> </ul> | <ul style="list-style-type: none"> <li>■ Federally <b>illegal</b> (10-States legal)</li> <li>■ Usage: mainly recreational with a few medical applications</li> <li>■ Primary compound: <b>THC</b> (Tetrahydrocannabinol) grown for its psychoactive properties</li> <li>■ Main markets: mood-enhancing (smoking, edible, vaping &amp; infused beverages) products</li> </ul> |
|---|--|

**The U.S. hemp-CBD market is growing faster than marijuana and will be a \$22 billion industry by 2020 (up from \$600m in 2018).**



# CBD Oil Extraction

- **Cannabis** extracts include pharmaceutical-grade **CBD oil** used for body, health and medical applications
- CBD product market will grow 700% to \$2.2 billion market in 2020.
- CBD oil extraction systems fit in highly-sanitized PODs.



## CO2 Extraction Systems

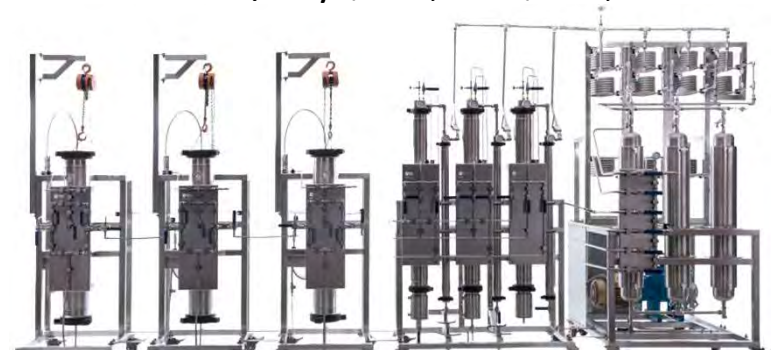
### Apex Commercial

Revenue/Day \$25,424-\$76,463



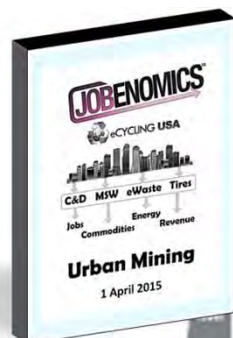
### Eden Labs Industrial

Revenue/Day \$163,440-\$217,920

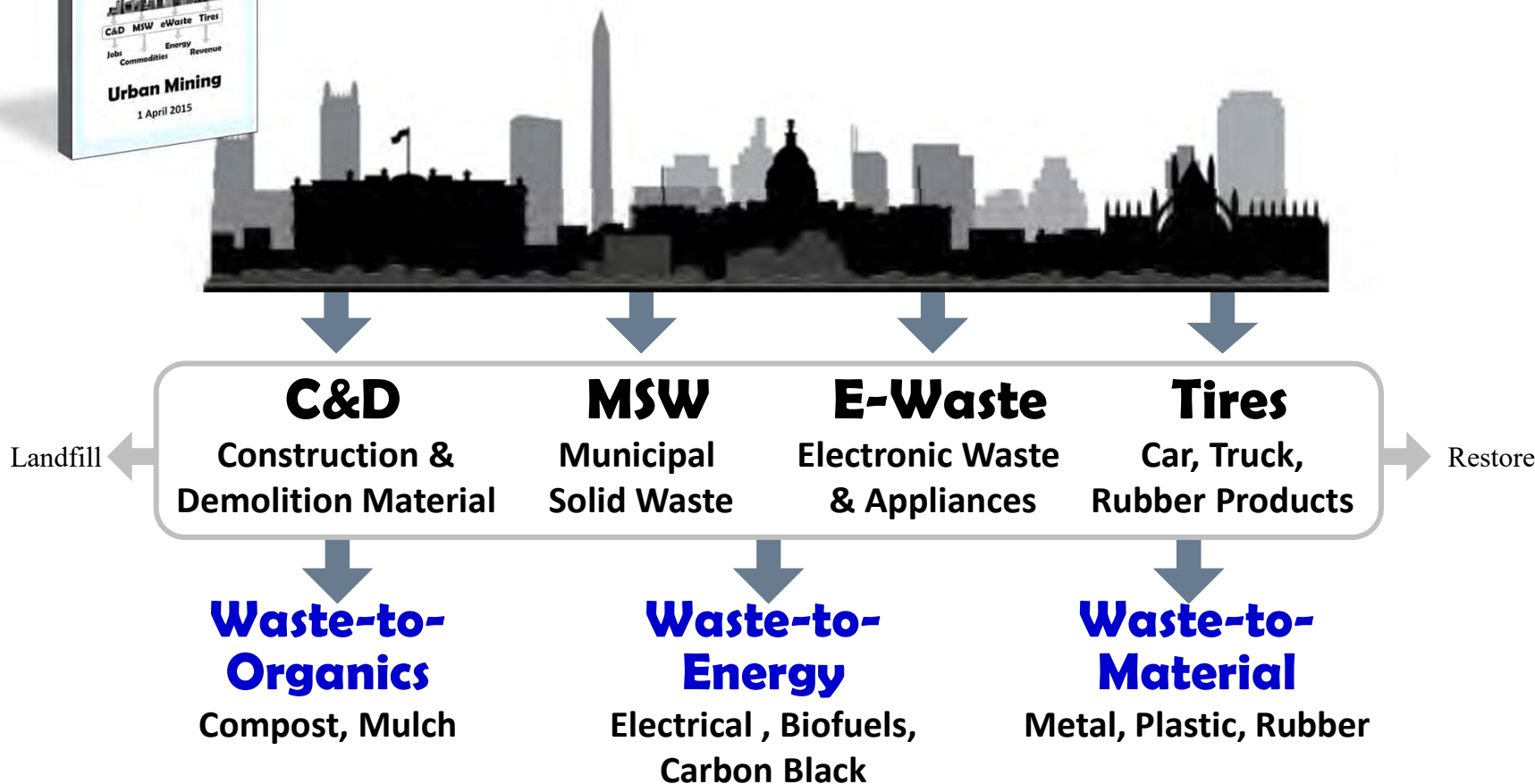


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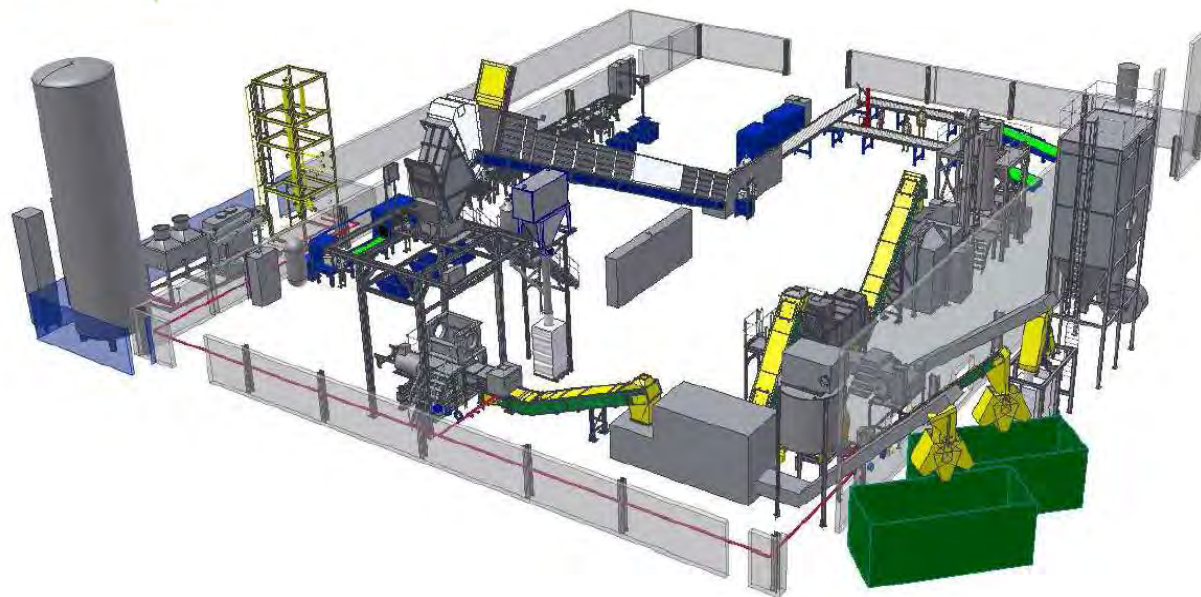
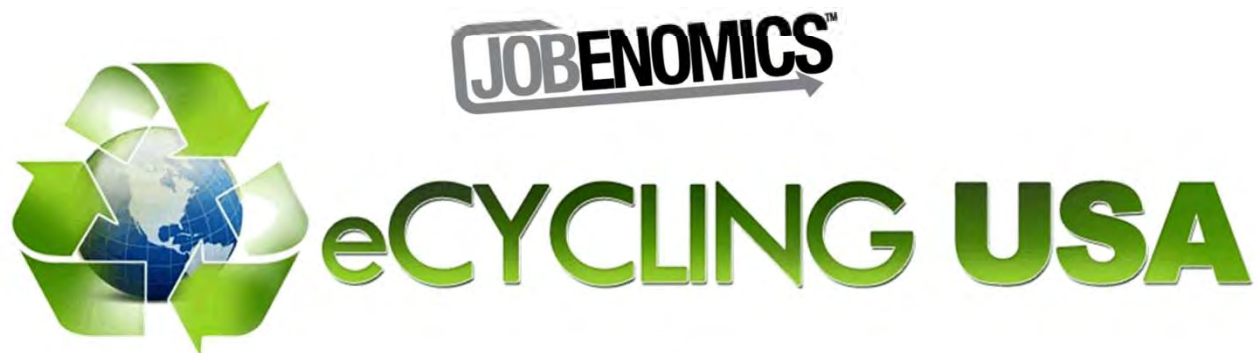
# Jobenomics Urban Mining



Reclamation of valuable raw materials and metals from urban waste streams.



**Urban Mining Goal: Monetize urban waste streams to produce businesses, jobs and revenues for workforce development.**



**A new approach to urban mining, materials reclamation and business/job creation.**



# eWaste Material Reclamation Facility



**100 Operational Sites**

**Operational within 12-months after contract award.  
Up to \$40 million/year profits and 200 direct jobs.**

# eCyclingUSA Plants

- **Two Line 10 Ton/Hour Plant:**  
(Refrigeration & eScrap Separate Lines)
  - Equipment ≈ \$20 Million
  - 40,000 square foot facility
  - 10 to 15 acres
- **Combination 10 Ton/Hour Plant:**  
(Refrigeration & eScrap Shared Post Processing)
  - Equipment ≈ \$13 Million
  - 35,000 square foot facility
  - 5 to 10 acres
- **eScrap Only 3 Ton/Hour Plant:**
  - Equipment ≈ \$5 Million
  - 8,000 square foot facility
  - 1 to 2 acres



eCyclingUSA can implement a turnkey plant **within 12 months.**

# Revenue & Profit Projections

(10 ton/hour plant operating 3 shifts)

## \$ Value of e-Waste Raw Materials

**For Rough Estimating Purposes Only**

**10 ton/hour plant operating 3 shifts per day for 300 days per year**

Feedstock: Computers, Consumer Electronics, Small and Large Appliances

Metal/Material	% of Feedstock	\$s per Metric Ton*	\$/Ton (2204 pounds)	Total \$/Year (10 ton/hour x 23 hour/day x 300 days/year)
Iron/Steel (Fe)	40%	\$ 350	\$ 140.00	\$ 9,660,000
Copper (85% Recovery)	5%	\$ 3,945	\$ 197.26	\$ 13,610,802
Aluminum (Al)	10%	\$ 1,499	\$ 149.87	\$ 10,341,168
ABS Plastics	25%	\$ 1,675	\$ 418.75	\$ 28,893,750
Other Plastics	25%	\$ 287	\$ 71.75	\$ 4,950,750
Computer Components	5%	\$ 2,082	\$ 104.10	\$ 7,182,900

Source: Jobenomics, eCyclingUSA

110%

Revenue\*\* \$ 74,639,370

Cost of goods sold \$ 30,238,000

Operating expenses \$ 5,780,000

Net Income \$ 38,621,370

EBITDA 52%

\* Scrap prices as of 12 March 2018

\*\*Does not include grants, tax incentives or tipping fees

**Profits from e-Waste operations can be used for community, micro-business and workforce development.**



**Jobenomics National Grassroots Movement**  
focus is on mass-producing small businesses and jobs.



**Jobenomics Direct-Care Program** delivers remote on-demand, health, social assistance, behavioral, child, and elder care services via a web-based direct-care center. Millions of new direct-care occupations are needed due the inability of traditional institutions to service ever-growing medical, health and societal needs of underserved urban and rural communities.



# Direct-Care Program

- **Direct-Care Services** include:
  - **Healthcare** and **social assistance**, the fastest growing occupations in the USA.
  - **Behavioral-care** includes drug addition, PTSD, obesity, spousal abuse, chronic illness, etc.
  - **Elder-care** forecasts 17 million assisted-living bed shortfall by 2020.
  - **Child-care** is the single biggest cost keeping women homebound.
- **Direct-Care Center** would connect service providers and clients via a **call and information center**. The center would start **home-based firms** certified to provide **in-home services** while connected to tele-health and other providers.



**Jobenomics Community-Based Business Generators would certify employees and small businesses for the Direct-Care Center.**



# Direct-Care Program Apps

## Examples of On-Demand Direct-Care Programs

- **Teladoc** is the largest telehealth platform with 20 million members and over 3,000 licensed healthcare professionals.
- **DoctorOnDemand** connects patients in minutes to board-certified doctors and therapists over live video.
- **Go2Nurse** is an on-demand nurse/caretaker application service.
- **referralMD**'s standardizes referral network communication between primary care physicians and specialists.
- **American Well** is a complete telehealth service for healthcare companies, employers, or delivery networks.
- **MDLive**'s telemedicine system offers a patient experience, a provider experience, and a call center.
- **SnapMD** is virtual care management system with a patient interface, a provider interface and an administrative back-end.

**In 2018, Canadian-based TELUS Health and U.K. Babylon combined forces to bring advanced digital health technologies to Canada.**

# CLINICSTOP Micro Clinic for Diagnosis, Counseling and Remote Care

[www.clinicstop.com](http://www.clinicstop.com)



**Ideal for pharmacies, churches, community centers that provide healthcare, social assistance, and behavioral care.**



# Next-Generation Business & Job Creation Opportunities



The ETR, NTR and Digital Economy will create **10s of millions** of new jobs and millions of micro and nonemployer businesses.

# Energy Technology Revolution

## **The ETR Is A Perfect Storm of Energy Technologies, Processes and Systems :**

Renewable Energy Sources (Biomass/Biofuels/Wood, Hydroelectric & Hydrokinetic, Wind, Solar, Geothermal, Municipal Waste), Alternative Fuels, Advanced Batteries, Advanced Vehicles (Electric Vehicles, Fuel Cells, Hydrogen Vehicles), Nuclear (Small Modular Reactors, Fusion Reactors), Coal, Conventional and Unconventional Oil & Gas (Petroleum & Other Fluids, Natural Gas, LNG & GTL, Methane Hydrates), Exotics and Yet Unknown Technologies as well as new energy services including Energy Efficiency. Energy Conservation, Energy-as-a-Service (EaaS), Energy Assurance and Security and Energy Disaster Preparedness and Recovery Services.



## **The ETR Will Revolutionize Labor Forces, Economies And Nations Via The:**

Renewable energy sources, micro-grids, net-zero communities, advanced vehicles, alternative fuels, energy storage devices and smart networks will allow energy generation to occur closer to the consumer. Generating power close to the point-of-consumption eliminates cost, complexity, interdependencies and inefficiencies associated with transmission and distribution over 3-5 million miles of power lines in North America.

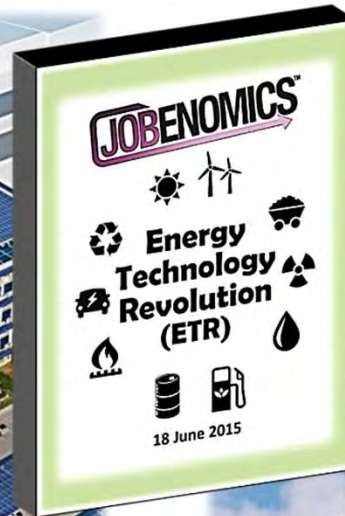
**California and Germany are at the forefront of the ETR transformation.**



# Renewable Energy Businesses & Green Jobs



**Net Zero Buildings &  
Communities Installation &  
Maintenance Businesses**



**Energy Audit, Weatherization  
& Renovation Businesses**

**The Energy Technology Revolution will create millions of new micro-business opportunities, such as independent contractors.**

# Green Jobs

- Jobenomics-EmeraldPlanet collaboration involves bringing the world's 1,000 best green job practices to local communities.

## Dr. Samuel Lee Hancock

President & Executive  
Director, EmeraldPlanet  
International Foundation

Creator & Host, The  
EmeraldPlanet TV

[www.Emerald-Planet.org](http://www.Emerald-Planet.org)



## Chuck Vollmer

Founder & President  
Jobenomics National  
Grassroots Movement

EmeraldPlanet Board  
Member & Partner

[www.Jobenomics.com](http://www.Jobenomics.com)

- Our collaboration focuses on innovative, sustainable, and resilient “green” environmental, economic and community development practices and projects around the globe.
- EmeraldPlanet is also partnered with the U.N. Economic and Social Council and The World Bank Connect4Climate Program.

**Goal: sustainable environmental, economic & social development.**

# Green Business & Job Creation Programs



Examples of **highly-scalable** Jobenomics-EmeraldPlanet green business and job creation programs include:

- **Renewable energy**: solar, wind, low-flow hydro in tall buildings
- **Energy Efficiency**: energy audits, weatherization, renovation; LED electrical upgrading
- **Aquaculture**: aquaponics, hydroponics, water gardens, and salt water ecological farming
- **Storm Water Abatement**: urban capture, processing and retention; home-side water capture and reuse; rain gardens
- **Environmental Remediation**: soil, watershed and marshland remediation and regeneration
- **Affordable Housing**: small/tiny home construction & installation

The Jobenomics-EmeraldPlanet collaboration emphasizes green micro-business creation in under-resourced urban and rural communities. <sup>31</sup>

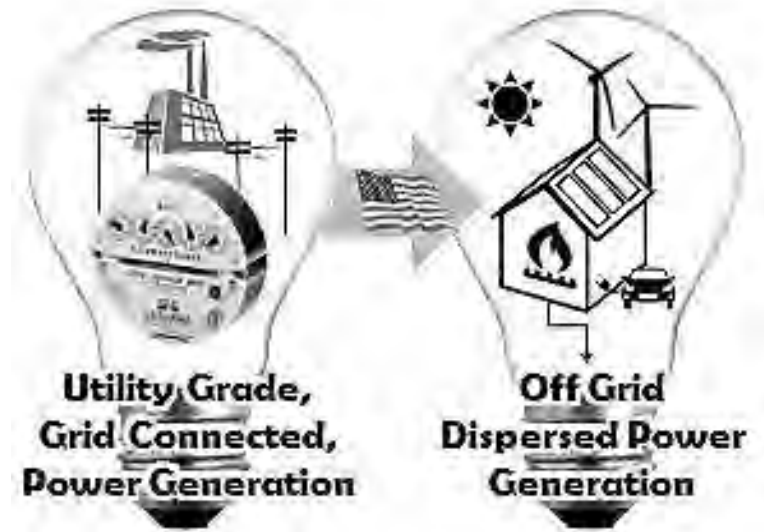


# Energy Services

- Demand Side Energetics
- Net-Zero Communities/Buildings
- Services: “**Energy’s 3<sup>rd</sup> Rail**”
  - Energy Efficiency/Conservation
  - Energy Assurance/Security
  - Disaster Preparedness/Recovery
  - Energy-as-a-Service (EaaS)
- Energy Technology Center



## Demand Side Energetics



Jobenomics' Joe Sarubbi with President Obama and Mrs. Biden

# Energy Services Jobs (Examples)

## ■ White Collar Occupations

- Demand-side Energy Management
- Control Systems Management
- Storage (Battery and Fuel Cell)
- Intelligent Metering Services
- MicroGrid Management
  - ✓ Photovoltaic
  - ✓ Wind
  - ✓ Hydro
  - ✓ Geo Thermal
  - ✓ Nuclear
  - ✓ Hydrogen
  - ✓ Electric Vehicle
- Tax and GRANT Financial Specialists

## ■ Blue Collar Occupations

- Sustainability Consultant
- Array Sizing Specialist
- Project Managers
- Design Specialists
- Installers
- Inspectors
- Help Desk Personnel
- Field Support Personnel
- Operational Services Specialists
  - ✓ Security
  - ✓ Operations
  - ✓ Maintainability
  - ✓ Product Support

**J-SMRDI will provide skills-based training and certification programs for these occupations.**

# Network Technology Revolution (NTR)



**The Network Technology Revolution will create 10s of millions of new business and job opportunities, especially for digital natives.**

**\$124 trillion global economic impact by 2025.**



# Network Technology Revolution

The NTR is defined by Jobenomics as a perfect storm of transformative network and digital technologies, processes, systems and services including:

Big Data, Cloud Computing, Semantic Webs, Synthetic Reality, Mobile Computing, Ubiquitous Computing, Quantum Computing, 5G Broadband, Geo-Location, Near-Field Communications and Beacons, Inductive Charging, Spatial Sensing, Computer Vision and Pattern Recognition, Natural Language Processing and Speech Recognition, Data Mining and Predictive Analysis, Machine Learning, Transfer Learning, Deep Learning, Robotics, Telepresence and Telechairs, Nanobotics, Chatbots, Mechatronics, Memetics, Biometrics, Smart Cards, Blockchains, FinTech, Multifactor Credentialing, Emotive Surveillance and Management, Identity Management, Anonymity Networks, Ambient Intelligence, Artificial Intelligence and Intelligent Agents.



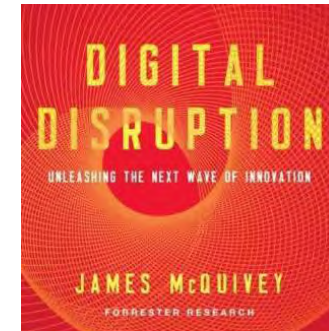
The NTR will be both brilliantly innovative and creatively disruptive:

- Creating** new global jobs and businesses,
- Destroying** existing jobs and businesses,
- Revamping** institutions and governments,
- Instituting** new and different ideas, beliefs, behaviors and cultures, and
- Changing** the very nature of human endeavor and work.

The global economy will be shaped by the digital generation (Screenagers & Millennials) and the ideology of their mentors.

# Digital Scaleups & Startups

- “Digital startups are at least **100-times easier to create** and have 10-times the number of innovators that can innovate at one-tenth the cost than traditional startups.” (McQuivey)



- **Top digital scaleup and startup platforms:** Amazon (2 million third-party sellers), Apple Store (650,000 apps developers), Google, Facebook, eBay, Craig's List, unicorns and gazelles.
- **Examples of digital occupations:** Digital health (health care, elder care, wellness, behavior care), shared economy (Uber, Airbnb), content providers, construction, transportation, technology, and various forms of mom-and-pop firms.

**Unlike other countries, U.S. policy-makers and decision-leaders are not concentrating on the economic impact of the digital economy.**

# Digital Economy & Academies



- **Electronic Commerce**
  - Mobile Economy
  - Sharing Economy
- **On-Demand Economy**
- **Apps/Bots Economy**
  - Gig Economy
  - IoT Economy

## Digital Academies



The tradition economy growing at 2% per versus eCommerce growth of 15% per year. Jobenomics' team of eCommerce experts help set up websites to selling on all major platforms; Amazon, Google, Facebook, eBay and Shopify.



# Jobenomics Community-Based Business Generator (JCBBG) Concept



A JCBBG **mass-produces** startup businesses by:

- Working with community leaders to identify high-potential business owners and employees,
- Executing a due diligence process to identify and assess work and social skills and aptitudes,
- Training and certifying participants in targeted occupations,
- Incorporating highly-scalable small and self-employed businesses,
- Establishing sources of funding and contracts to provide a consistent source of revenue for new businesses,
- Providing mentoring and back-office support services to extend the life span and profitability of new businesses.

**Most cities have Business Incubators and Business Accelerators, but not Business Generators for low-income citizens.**

# Jobenomics Community-Based Business Generator (JCBBG) Concept



**Due Diligence & Candidate Selection Process**  
**Incorporate Self-Employed Business**

**Skills-Based  
Training &  
Certification  
Programs**



**Pipeline To Full-  
Time Jobs (W2)  
Or Independent  
(1099) Work**

**Scaleup Existing Businesses**  
**Startup Micro Businesses**

**Most cities have [Business Incubators](#) and [Business Accelerators](#),  
but not [Business Generators](#) for low-income citizens.**

# 9,000 Online Skills-Based Training And Certification Programs

- For many unemployed and sidelined inner-city citizens, earning a college education is not realistic.
- Skill-based training programs can provide citizens with federally- accredited skills within weeks to months.
- Some accredited online Training & Certification Providers:
  - UDC Community College: <https://www.udc.edu>
  - 360training: <http://www.360training.com>
  - ExpertRating: <http://www.expertrating.com/>
  - American Institute of Small Business: <http://www.ed2go.com/business>



**Goal: “Lifelong Applied Learning” with “Certifications in weeks, jobs in months and careers within a year.”**



# Entrepreneur Emmment Centers

- Club E (Atlanta) is a co-working entrepreneur emment center.



- Club E Startups:



**ECentrs Fund is willing to expand to the San Marcos Region.**

# Elite Sports Program



Elite Sports Atlanta (ESA) is a full service sports-training, player-development and promotional events company. See: [www.elitesportsatlanta.com](http://www.elitesportsatlanta.com)

- ESA partners with schools to develop customized educational curricula and after school programs geared towards keeping young people motivated while they receive physical conditioning.
- ESA's services include training, sports camps, scouting, recruiting, pro camps, job opportunities and resource offerings for college placement and physical training programs.
- ESA has a dynamic pool of experts, entrepreneurs, sports professionals, and investors to develop a \$95M, 700,000 square-foot all-inclusive, multi-sport, indoor athletic training complex in 125-acre campus in South Fulton County, Georgia.

**ESA is willing to develop an Elite Sports Complex in Texas to service the five million people in the San Antonio to Austin metroplex.**

## **Contact Information**

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