Augusta Innovation District

DR. ED EGAN, DIRECTOR
MCNAIR CENTER FOR ENTREPRENEURSHIP AND INNOVATION
High-growth, high-tech as a driver of U.S. economic growth

The big picture

► U.S. GDP growth is currently around 2% (in real terms).
► There was a structural break around 1980, where growth dropped markedly. This drop coincides with the rise of the innovation economy.
► Between half and two-thirds of U.S. growth now comes from the high-growth, high-tech sector!
► Approximately 28 million U.S. firms. Growth comes disproportionately from around 55,000.
High-growth, High-tech firms

Breaking down the 55,000

- Around 500 publicly-traded, high-growth, high-tech firms. They are growing at more than 10% per year on metrics like sales, employment, total assets, etc., and around 25% per year in market cap. In October 2016, the 5 largest firms were all HGHT.

- Behind them are around 5,000 firms that are currently receiving venture capital (VC). They aspire to achieve an IPO or an acquisition.

- Behind them are around 50,000 firms that aspire to receive VC.
What is an HGHT startup?

It’s all about growth

- HGHT startups have to grow from nothing to IPO or acquisition in around 5 to 6 years.
- They typically start with 1-3 employees and then progress 3-8, around 40, around 150, and perhaps on to 200-400 before exit.
- Burn-rates (using Other People’s Money) go from hundreds of dollars a day up to $100,000s a day, with highly successful startups burning more than $1m per day.
- Nothing matters except growth!
Lean Startup Methodology

Learn, partner, pivot

- Startups come up with Minimum Viable Products and get them into the hands of their users as fast as possible.
- They partner with customers, suppliers, developers, capital providers, etc. A startup focuses just on its core. But its entire business is an MVP.
- Phase 1: Learn, test and iterate. Everything is experimental.
- Phase 2: Repeat and Scale. Broaden up the product’s functionality and/or the range.
- Phase 3: Formalize and grow, grow, grow.
What is venture capital?

Venture Capital

► Venture capitalists make equity-based investments in nascent ventures and hold their positions until IPO or an acquisition.

► There are strong persistent returns to venture capital. The best VCs make the greatest returns year on year.

► Lots of people call themselves VCs! The main distinctions are:
  ▶ Market vs. non-market money
  ▶ VC vs. PE
  ▶ Expertise
  ▶ Size and sequence
Ecosystem Institutions

Accelerators
► Generally 12-16wk programs that train CEOs (and other C-level staff) and cumulate in a pitch day.

Incubators
► No fixed curriculum or duration. Firms move in and are assigned mentors and receive support services.

Hubs
► Co-working spaces on steroids that have dedicated programming for HGHT entrepreneurship.
“Classic” entrepreneurship-driven growth develops in ecosystems

- Economic Factors
  - Skilled Labor
  - Regulatory Environment
  - Established Incumbent Firms

- Sources of Funding
  - Angel Investors
  - Venture Capital Firms
  - Micro-Financing
  - Crowd-Funding

- Entrepreneurship Institutions
  - Accelerators
  - Incubators
  - Hubs
  - Entrepreneurship Education
  - Existing VC-Funded Firms
  - Serial Entrepreneur Community
  - Entrepreneurship Clubs

- Research Environment
  - Universities
  - Laboratories
Dropping in the Rankings

- Atlanta is currently ranked 26th for HGHT entrepreneurship among U.S. cities, with $117m VC invested, 6 new deals, and 100 active startups, in 2016.

- But it doesn’t have a high startup density (212 per million people) and has dropped 9 places in the ranking relative to 2015.

- Even so, Augusta should expect a beggar-thy-neighbor effect from Atlanta. There are returns to being in a strong ecosystem.
Entrepreneurship institutions are not drivers of the Augusta economy

<table>
<thead>
<tr>
<th>Feature of Ecosystem</th>
<th>Number In Augusta</th>
<th>Number In Proximity</th>
<th>Number in Silicon Valley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerators</td>
<td>0</td>
<td>10</td>
<td>44</td>
</tr>
<tr>
<td>Incubators</td>
<td>1*</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Hubs</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Historic</td>
<td>2</td>
<td>223</td>
<td>4220</td>
</tr>
</tbody>
</table>
VC Data Last Decade

Augusta
► 1 Historic VC Deal: Hill Broadcasting in a joint venture with San Francisco investment firm (about 10 yrs back)

Surrounding Areas
► Atlanta: ~200 VC deals, 13 cybersecurity-related
  ► 3 Internet Security and Transaction services
  ► 10 Security/Firewalls/Encryption
► Charleston, SC: 17 VC deals, 1 cybersecurity-related
► Athens, GA: 7 VC deals
Accelerator Programs

Augusta

- None. But 9 startups listed in Augusta Startup Angel List...

Atlanta


- Also includes Flashpoint (and Venture Lab) at Georgia Tech
  - Invests $20k, Mentoring from experienced tech entrepreneurs, Shared workspace, Demo days for investors in Atlanta, NYC, San Francisco
  - Potential model for Augusta University?
There are limited high-growth funding opportunities in Augusta

Augusta – No Tier (2016)

- 0 Venture capital firms
- $0 Venture capital investments
- 0 Angel or Crowd Funding Opportunities

Birmingham – Tier 3 (2016)

- 29 Venture capital firms
- $30m Venture capital investments
- 0 Angel or Crowd Funding Opportunities
Public Firms — Potential for R&D Funding and partnerships

Augusta

- Southeastern Bank Financial Corp, ~80M in revenue/year, No R&D expenditure listed in 10k. Not a likely partner.

Georgia

- Total of 3.6M R&D funding throughout the state ($460k from companies on NYSE, NASDAQ, AMEX)
- But a broader range of Fortune 1500 companies covering banking, transport and logistics, and sectors where cyber is relevant in state.
- Specific partners might include American Software, Equifax, Intelligent System Corp, Concurrent Computer, NCR, Agilysys, and others.
Cities with similar profiles are outperforming Augusta

<table>
<thead>
<tr>
<th>Augusta – Not Ranked</th>
<th>Birmingham – Tier 3</th>
<th>Atlanta – Tier 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>200,000</td>
<td>210,000</td>
</tr>
<tr>
<td>GDP per Capita</td>
<td>$33,000</td>
<td>$49,000</td>
</tr>
<tr>
<td>National Rank</td>
<td>N/A</td>
<td>75th</td>
</tr>
<tr>
<td>% college grads</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>VC Invested</td>
<td>0MM</td>
<td>30MM</td>
</tr>
<tr>
<td># VC Start-ups</td>
<td>0</td>
<td>13</td>
</tr>
</tbody>
</table>

% college grads: Augusta 20%, Birmingham 25%, Atlanta 48%
A different path forward...

Grants and Contracts

- The world of SBIR/STTR backed startups is different from the world of HGHT startups
- At the macro-level, there is evidence of some overlap – places that get more SBIR grants attract more VC dollars
- At the micro-level, there is evidence that small businesses that secure SBIR grants are more likely to receive VC than those that apply but don’t
- There are issues with “grant-mills”. Taking more than one or two grants might be bad – it indicates that you aren’t playing the HGHT game!
Capital  Ecosystem Organizations  Incumbents  Education
Current environment can be bolstered for Fort Gordon synergy

Utilize relationship with Atlanta: 13 Cybersecurity-related VC deals in Atlanta in the last decade
- 3 Internet Security and Transaction services
- 10 Security/Firewalls/Encryption

Development of Augusta’s Cyber Ed Capabilities: Cyber Innovation and Training Lab
- Scheduled to finish in July 2018
- $50 million investment to bring together key players in the cyber workforce

Utilize Interested Partners Who Invested in Innovation Lab
Augusta University Cyber Institute, GA DOE, GA Technology Authority, National Security Agency, Private-Sector Partners, Technical College System of GA, U.S. Army, U.S. Cyber School of Excellence, and more
Grants and contracts can provide funding to nascent businesses

**Augusta Grants**

<table>
<thead>
<tr>
<th>Number</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>187</td>
<td>Department of Health and Human Services</td>
</tr>
<tr>
<td>42</td>
<td>Department of Housing and Urban Development</td>
</tr>
<tr>
<td>16</td>
<td>Veterans Health administration</td>
</tr>
<tr>
<td>11</td>
<td>Department of Education</td>
</tr>
<tr>
<td>10</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>4</td>
<td>NSF</td>
</tr>
<tr>
<td>+</td>
<td>Department of Energy, Social Security Administration, and more</td>
</tr>
</tbody>
</table>

**Augusta Contracts**

<table>
<thead>
<tr>
<th>Number</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>764</td>
<td>DOD Contracts</td>
</tr>
<tr>
<td>219</td>
<td>Department of Veterans Affairs</td>
</tr>
<tr>
<td>90</td>
<td>Department of Justice</td>
</tr>
<tr>
<td>44</td>
<td>Department of Homeland Security</td>
</tr>
<tr>
<td>28</td>
<td>General Services Administration</td>
</tr>
<tr>
<td>16</td>
<td>Department of Agriculture</td>
</tr>
<tr>
<td>9</td>
<td>Department of State</td>
</tr>
<tr>
<td>+</td>
<td>Social Security Administration, Department of Health and Human Services, Department of Commerce, and more</td>
</tr>
</tbody>
</table>
Partners for growth could be drawn from past sponsors of innovation.
Other incumbents

**New Incumbents are coming**

- An incumbent doesn’t need to be headquartered here to play with startups here!
- A lot of incumbents are going to be drawn in by the promise of DOD contracts (etc.)
- Incumbents are crucial to startups as development partners, customers, suppliers, and potential acquisition partners.
Current Resources Indicate Potential

**TheClubhou.se**
Augusta startup incubator
Workspace
Coding bootcamp

**Augusta Innovation Zone**
Workspace opening fall 2017
6 directors, including Deke Copenhaver
>200 people on the waiting list
New Ecosystem Organizations

Building bridges

- Augusta might want to consider creating some new resources to help small businesses secure SBIR grants, spring companies out of Augusta University (perhaps with STTR grants), and compete for other grants and contracts.

- These organizations could intermediate between Fort Gordon, Augusta U., the incumbents and the startups by running competitions, challenges, meet-ups etc.
Augusta’s economic and research environment can be leveraged

| Skilled Workforce     | ▪ 83.3% of Augusta has a GED or higher, 20.4% have BA or higher  
                          ▪ DoE Nuclear Site and Fort Gordon workforces  
                          ▪ Major university and regional corporate headquarters |
|-----------------------|---------------------------------------------------------------|
| Research Environment  | ▪ Augusta University ranked 110th in U.S. for patents  
                          ▪ $3.6 MM of R&D spending throughout the state of GA  
                          ▪ 64 corporate patents in Augusta since 1981 |
| Business Profile      | ▪ Some incumbent firms  
                          ▪ Friendly regulatory environment |
Tax Allocation, Enterprise, and Opportunity Zones Provide Incentives

**Tax Allocation Districts**
- Incremental tax revenue in these districts goes into a fund to supplement funding by public and private sources for public improvements that spur private redevelopment activity.
- Tax exempt bonds may be issued to pay for infrastructure and other eligible redevelopment costs in partnership with private developers.

**Enterprise and Opportunity Zones**
- Enterprise Zones are designated geographical areas which suffer from disinvestment, underdeveloped, and general economic distress. Opportunity Zones, similar to Enterprise Zones, are designated geographic areas which suffer from economic distress.
- Ad valorem taxes are abated for up to 10 years and other incentives are provided to private employers who create five or more new jobs.

**Other Programs to Consider**
- Tax credit bonds - Build America Bonds, Recovery Zone Economic Bonds, and Clean Renewable Energy Bonds
- New Market Tax Credits
- Housing and Urban Development Community Development Grants
Five Takeaway Points

Building Augusta

► Augusta is unique. You have a unique path forward. Don’t try to be somewhere else.

► Behave like a startup. Learn, experiment, pivot. Build MVPs and engage in partnerships. Remember that *all innovation lies with the user*.

► If you get traction, don’t just keep doing the same thing! Reinvent yourselves to become the next iteration.

► Bring an expert home. This is experiential learning – find someone that has world-class experience.

► Don’t pursue secondary objectives.
Thank you!

ED.EGAN@RICE.EDU
HTTP://MCNAIR.BAKERINSTITUTE.ORG