

An outline map of the state of Connecticut, showing its characteristic shape with a small notch at the top and a jagged coastline along the bottom and right sides. The text is overlaid on the map.

Connecticut

Engineering &
Computer Science

Deans **C**ouncil

Welcome to CCAT!

- **Welcome**
- **Introductions**
- **Overview**
- **Discussion**
- **Project Concept**
- **Future Meetings**
- **Happy Holidays**

- **Welcome**
- **Introductions**
- **Overview**
- **Discussion**
- **Project Concept**
- **Future Meetings**
- **Happy Holidays**

- **Introductions – *who is here, who else should be invited?***
- **Overview**
- **Discussion**
- **Project Concept**
- **Future Meetings**
- **Happy Holidays**

- **Overview – *Lou, Judy and Matthew give background***
- **Discussion**
- **Project Concept**
- **Future Meetings**
- **Happy Holidays**

- **Discussion – *Connections and gaps between business and academic pipeline of graduates and the knowledge they have acquired***
 - *How to calculate the future requirements of the business community*
 - *How to communicate what is needed and who is coming in near real time – a “dashboard?”*
 - *Intern programs*
 - *Dialogues about new and updated courses*
- **Project Concept**
- **Future Meetings**
- **Happy Holidays**

- **Project Concept –**
 - *Talent directory of students for businesses*
 - *Others?*
- **Future Meetings**
- **Happy Holidays**

- **Future Meetings**
 - Monthly?
 - Set day within the month?
 - Could send out proposed dates
 - Week
 - Day
 - Time of date
- **Adjourn - Happy Holidays**



STARTUP
CONNECTICUTSM
entrepreneurs create jobsSM

Overview Deck 2.0

Prepared by Matthew Nemerson and Casey Pickett for Kip Bergstrom

- Introductions
- Overview of process
 - Evolution of Innovation Ecosystem Planning process into Startup Connecticut
- Exercise
 - What is the one thing state can do to create a stronger environment to help *you* start more firms and keep them growing here?
- Discussion

Agenda – November 1 2011

“The chance that a small business will survive for five years in the United States is only about 35 percent. But entrepreneurs simply don’t believe that such statistics apply to them. Surveys show that on average, they estimate their chances of success at 60 percent—almost double the statistical reality.”

“An absence of delusions, therefore, would lead to less growth, innovation, and risk-taking. Excessive, even unrealistic, optimism plays a crucial role in generating prosperity.”

“Personal overconfidence has many pitfalls, but it can also lead the most optimistic among us to become entrepreneurial.

[It can lead] to Government official’s overconfidence [that] can lead administrations to consider their goals more achievable than they’re likely to be...”

Guy Sorman review of new book by Daniel Kaheneman “The Engine of Capitalism”

- ❖ Under Governor Dannel Malloy's administration in early 2011 as one piece of a economic development reinvention theme to listen to business and help create jobs and growth, a strategy to build more high growth start-ups and help high potential existing smaller firms was initiated.
- ❖ A plan for a deliberate, powerful and responsive "innovation ecosystem" for the state was designed.
- ❖ DECD Commissioner Catherine Smith made the effort a high priority for her Deputy Commissioner Kip Bergstrom.
- ❖ Bergstrom assembled a 25 person working group over the summer and produced a plan now known as "Startup Connecticut."

Building support for innovation & growth



GOV. MALLOY ANNOUNCES LAUNCH OF STARTUP CONNECTICUT

Newest Part of Strategy to Reinvent Connecticut; Initiatives will Fuel More Startups

(HARTFORD, CT) – Governor Dannel P. Malloy today joined with business leaders to announce the launch of Startup Connecticut, a new initiative that will help to reinvent Connecticut by assisting high-growth entrepreneurship throughout the state. Startup Connecticut will be part of a national network of state and regional efforts coordinated by the Startup America Partnership, the national organization working to help young companies grow in order to create jobs in the country. Connecticut becomes the third state in the nation to adopt its own regional initiative.

“Connecticut has always had a reputation as the home to innovative companies, technologies and workers,” said Governor Malloy. “But in recent years, people have begun to wonder if Connecticut’s best days are behind it. Nothing could be further from the truth. In finding new and innovative ways to compete in a 21st century economy, we also have to find new ways to reinvent Connecticut. I believe we have yet to effectively harness our potential to create new companies, help those already here, and maximize the job creation potential of both. The launching of Startup Connecticut will give us a series of coordinated efforts to improve our track record now.”

A group of almost two dozen entrepreneurial, business, government and academic leaders has met regularly with the Malloy Administration during the past five months, reviewing measures that should be taken to improve Connecticut’s efforts to support entrepreneurship and innovation. They concluded that better organization, coordination and networking of existing entities and creation of very focused and carefully designed new entities would produce the best results for the state, rather than starting from scratch.

Governor Malloy explained, “Startup Connecticut will form the basis of a new public/private partnership that will bring sweeping changes to how we approach and support our state’s startups and small business entrepreneurs. The goal is to launch many more startups in a much shorter timeframe, and increase the quality and levels of support for our existing base of smaller firms. This will create jobs as well as a vibrant innovation ecosystem in Connecticut, which will accelerate our economic recovery.”

The program will focus on several areas, including a hub design that will see regional centers established and supported by statewide efforts to bring technology, concept testing, mentors, funding and key business connections to firms where and when needed.

Scott Case, a successful entrepreneur who was founding CTO of Priceline in Connecticut and is now CEO of the Startup America Partnership, said, “I know first-hand that Connecticut is a tremendous place to start and grow a business. I look forward to working with Connecticut to take its startup ecosystem to the next level and build the next generation of companies whose innovation and growth will create more jobs.”

“Startup Connecticut will help maximize the resources of our existing small business leaders, entrepreneurs, universities, incubators, funders, and other support organizations, and in doing so will go a long way in improving the ability of Connecticut to market itself as an ideal location for high-tech startups and innovative, high-potential firms,” said DECD Commissioner Catherine Smith. “We look forward to leveraging Startup America from other states and joining into a national network of support systems that can link our firms to capital, administrative support and entrepreneurial support.”

•Additional information about Startup Connecticut can be found on its website at www.startupct.org.

Startup Connecticut announced 10/6/11



**STARTUP
CONNECTICUT**
entrepreneurs create jobs.

A year earlier, attention was focused on why Connecticut lagged behind other states with fewer resources

Report: CT's annual employment growth expected to be worst in country

December 2010

Connecticut is expected to have the lowest annual expected employment growth in the nation over the next five years, according to an industry study.

A recent report by New York-based IHS Global Insight, which provides economic and financial analysis, said Connecticut's annual employment is expected to grow by less than 1 percent over the next five years, the worst growth rate of any state in the country.

The number indicates just how painful Connecticut's economic recovery could be.

The Nutmeg state has lost nearly 100,000 jobs since the start of the recession in 2008. Connecticut did gain about 2,500 jobs in November, but the unemployment rate remains high at 9 percent.

The national unemployment rate is about 9.8 percent.

Connecticut's 0.9653 percent annual expected employment rate increase through 2016 ranked it dead last in the United States.

Arkansas, Iowa and Ohio, each had the next worst projected employment rate increases over the next five years at 1 percent, 1.1 percent and 1.2 percent respectively.

Meanwhile, neighboring states like Massachusetts, New Jersey, Maine and Rhode Island all have projected growth rates below 1.4 percent.

The largest expected employment growth rates are expected in Utah (2.7 percent), Idaho (2.4 percent), and Arizona (2.3 percent).

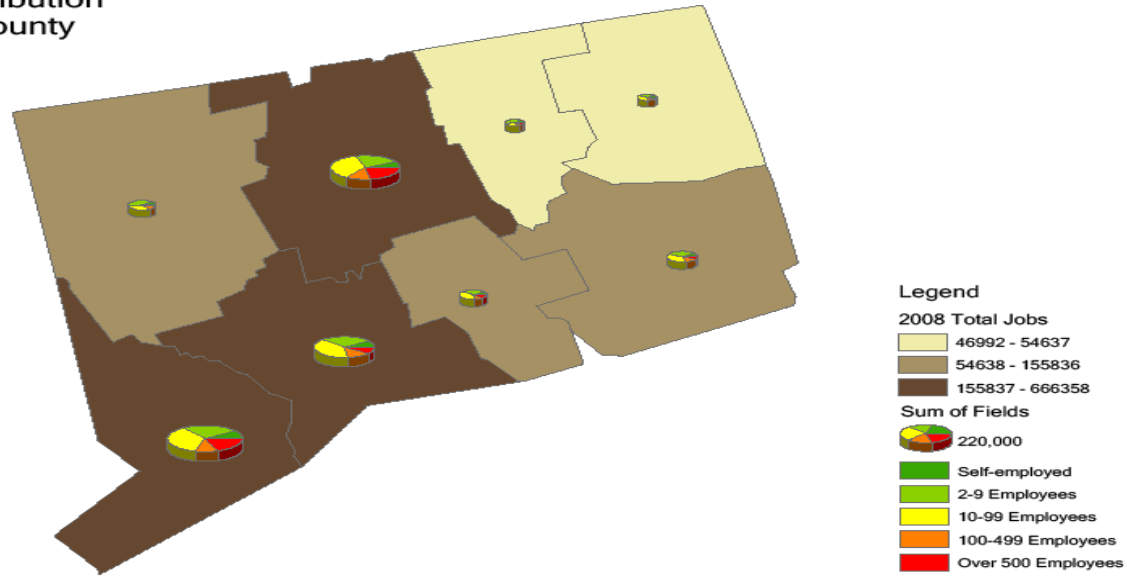
	2010 Kauffman ITIF New Economy Index Ranking (among 50 states)	
Manufacturing Value-Added		2
Inventor Patents	Positive attributes	5
Industry R&D		5
Venture Capital		7
IT Professionals		10
Scientists & Engineers		12
High Tech Jobs		14
Entrepreneurial Activity		22
Gazelle Jobs*	Negative results	23
Non-Industry R&D		37
Job Churning		50

Source: Kauffman Foundation and ITIF, 2010 State New Economy Index.

*Gazelle Jobs taken from Kauffman Foundation and ITIF, 2008 State New Economy Index.

Why the disconnect?

2008 CT Job Distribution
By Size and By County



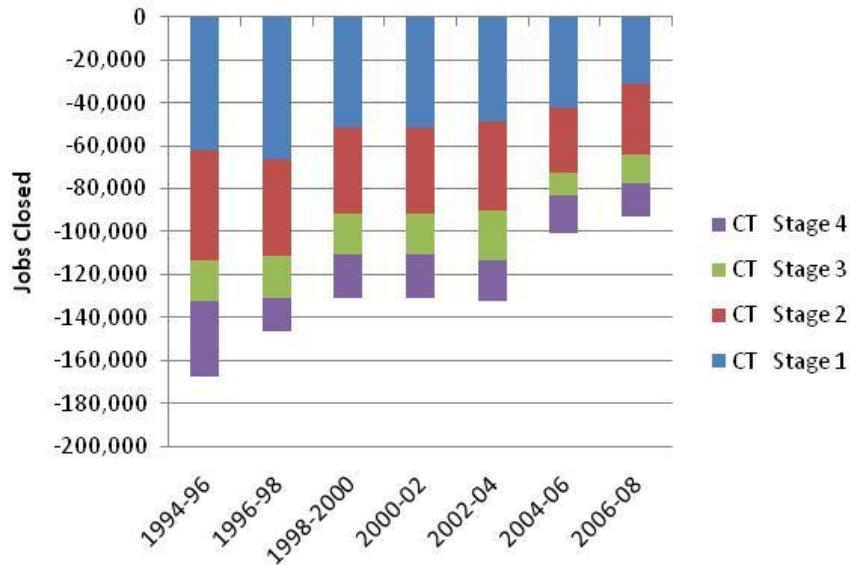
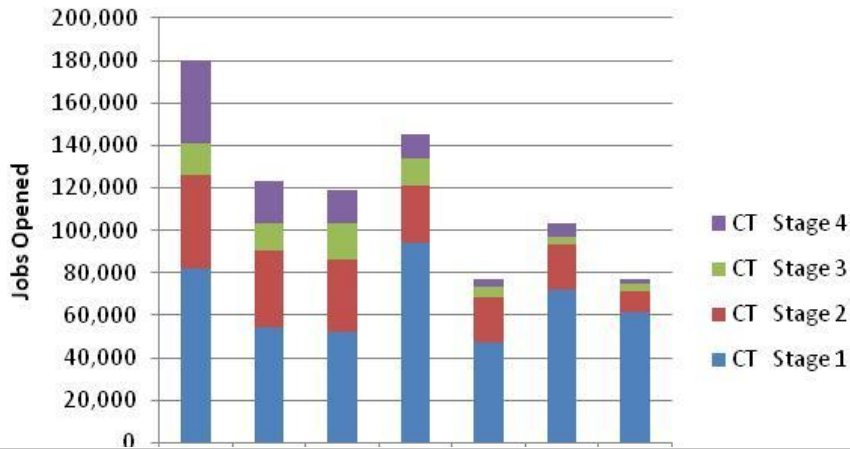
Connecticut, 2008	Employees	CT's % of Jobs	CT Rank in US
Stage 4	(500+)	15%	7
Stage 3	(100-499)	14%	23
Stage 2	(10-99)	33%	44
Stage 1	(2-9)	30%	34

Source: YourEconomy.com. Edward Lowe Foundation.

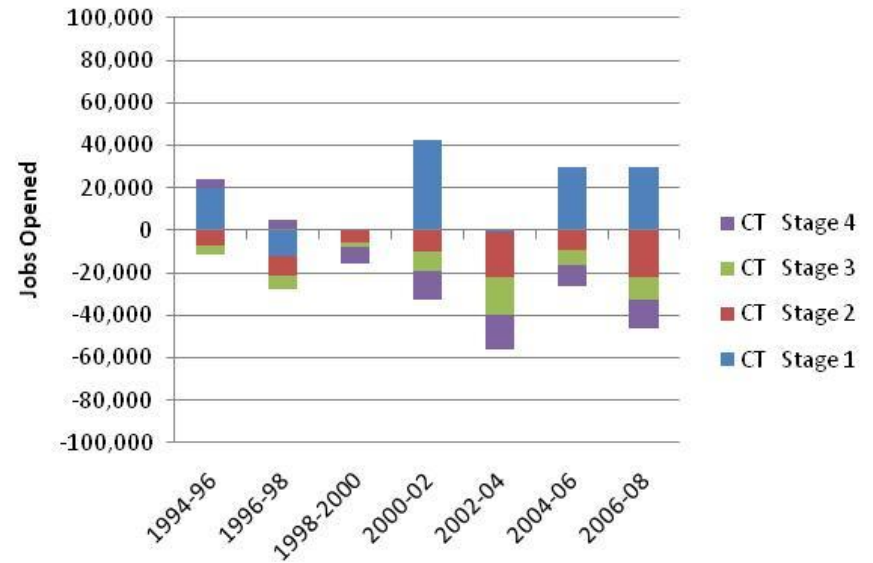
There are too few start-ups & stage 2's



Jobs opened by new firms



Net jobs opened



What will drive more new jobs?

2010 Rank	Index Score
1. New York	2.34
2. Washington	2.17
3. Massachusetts	2.04
4. New Jersey	1.93
5. Oregon	1.93
6. Louisiana	1.61
7. Illinois	1.57
8. Oklahoma	1.55
9. Texas	1.54
10. New Hampshire	1.49
11. North Dakota	1.48
12. Vermont	1.44
13. California	1.44
14. Delaware	1.43
15. Idaho	1.34
16. Wyoming	1.33
17. Connecticut	1.32
18. Kansas	1.23
19. Florida	1.21
20. Pennsylvania	1.20

The University of Nebraska-
Lincoln
Bureau of Business Research
© 2011

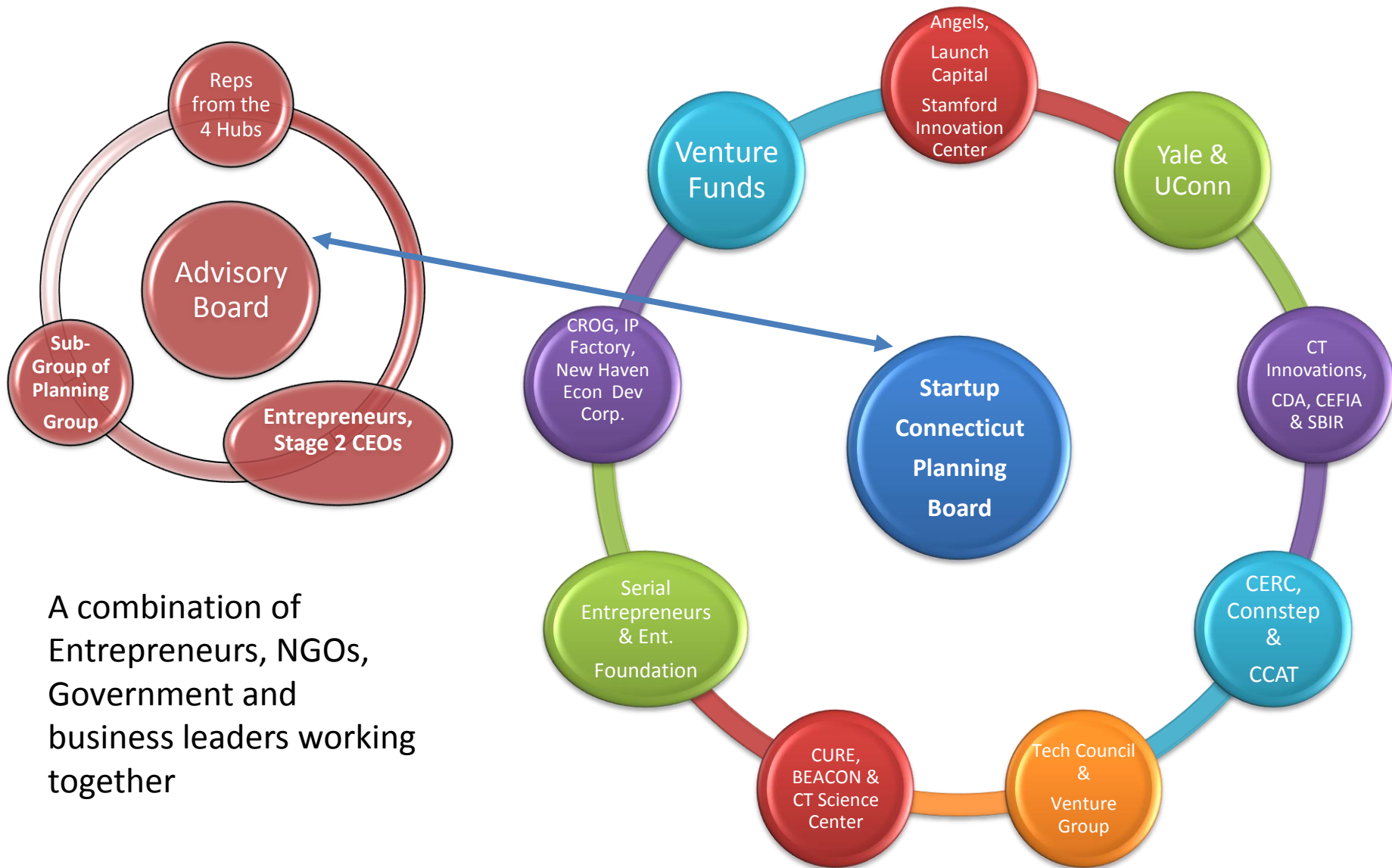
How to catch up with peer states

Draft – Please do not forward or copy



May 2011	July 2011	August 2011	Fall 2011
Who: Small group of UConn, Start-Up CT, CTC, DECD, CI Pre-seed	Expanded group to include CEFIA, Yale, CI, IP Factory	Expanded group to all TBED agencies	Expand group to statewide network
What: Best practices for accelerators, incubators and business plan competitions	Look at a model for the entire innovation ecosystem. Work with Kip to define his goals for Jobs Summit.	Complete surveys, bond through exercises, develop larger list for statewide network	Develop models for DECD to use as basis of TBED leadership in 2012
Results: Worked on proposals on concepts. Studied others systems	Built models and goals. Designed survey	Prioritize programs, develop budgets, design systems and relationships	Create ask for special session, build Innovation Ecosystem 2.0

Meeting to understand the Innovation Ecosystem



A combination of
 Entrepreneurs, NGOs,
 Government and
 business leaders working
 together

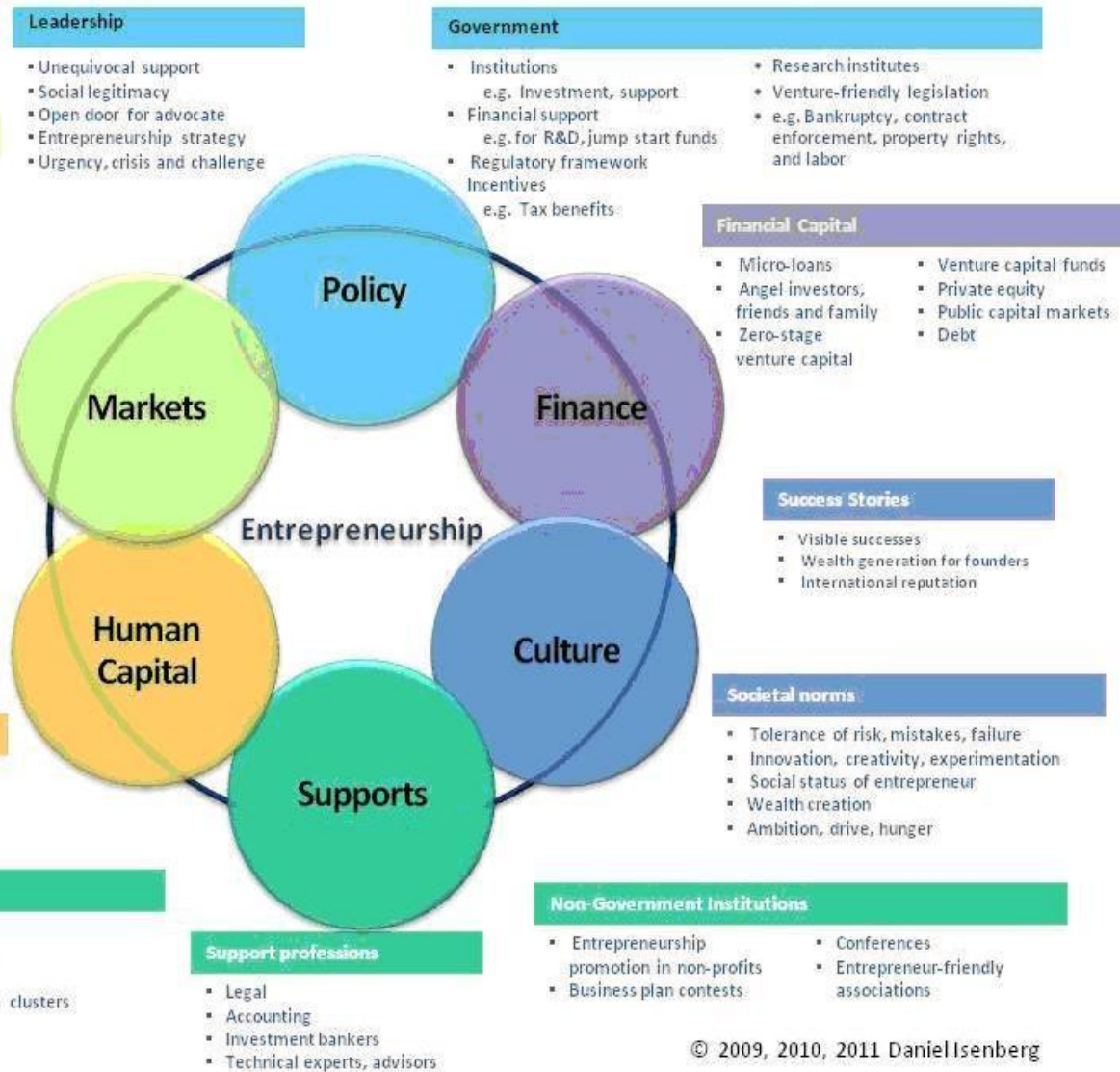
A diverse planning group

- Talked to the customer – the entrepreneur and the growing business CEO -- on “jobs tour”
- Used statewide experts to understand issues, find solutions, build consensus and develop priorities
- Looked at the whole system, not just parts
- Sought to create a new model, allocate resources, encourage collaboration and cooperation

Governor & Biz community reached out

Draft – Please do not forward or copy





5/19/2011

© 2009, 2010, 2011 Daniel Isenberg

Studied innovation ecosystem design

SSTI – A major innovation policy think tank

Key to success:

- State and fed gov't focusing on regions
- Everyone at the table
- Private leadership (beyond investors)
- Job-creating firms trump everything



Talked to national experts

- ❖ Over three months the group decided on goals for the new innovation ecosystem
- ❖ Reviewed and prioritized almost fifty programs and attributes needed to promote growth
- ❖ Worked on models for how a system should be set up between urban based Hubs and statewide resources and support
- ❖ Created a set of budgets and priorities for the Governor to present to the Legislature as part of the Jobs Special Session
- ❖ Branded the effort Startup Connecticut

Building support for innovation & growth



1. Success should be actual growth and jobs
 - Goal 1 – 50 high potential startups each year
 - Goal 2 – 75 “stage 2” firms assisted each year
2. Change culture of relationship between business and government
 - Agility, rapid cycles of program changes and improvement
 - Culture of experimentation and collaboration

Set goals to measure a performance

Goal 1 – Fostering high potential Start-Ups

1. Business plan competitions
2. Accelerators (e.g., TechStars)
3. Virtual Incubators
4. Building Based Incubators
5. Funding (Grants, stipends, Pre-Seed investments, Angel connections, etc.)
6. Retention Efforts for growing firms
7. Sponsored research programs for idea and product development between companies and in-state schools
8. Proof of concept Center with labs--Gov't as market maker
9. IP Factory and corporate networks
10. Student Teams and Interns Programs
11. Mentors Network, recruitment, training and matching
12. Entrepreneurs-In-Residence
13. "Rent a CxO" and turn-key management capacity for qualifying early stage concepts and firms
14. Serial Entrepreneur Fellows – Global Attraction Program
15. Professional Services matching and pro bono bank
16. Place-making and infrastructure such as i-TOD efforts to build a critical mass and a competitive set of locations
17. Branding and image coordination
18. Key labor matching and procurement programs
19. Technology training programs (i.e. CCSU, CC)
20. State, regional and hub based networking programs

Goal 2 – Assisting Stage 2 firms

1. New Technology, customer needs and marketing analysis
2. Connections with larger firms & new supply chains
3. Proof of concept contracts with state agencies
4. Grants and debt availability
5. Regulatory relief and help
6. Young talent, Job Training and matching
7. Build a retention strategy and mechanism
8. Opening up universities to collaboration
9. Sponsored research programs for idea and product development between companies and in-state schools
10. Proof of concept Center with labs--Gov't as market maker
11. IP Factory and corporate networks
12. Student Teams and Interns Programs
13. Mentors Network, recruitment, training and matching
14. Entrepreneurs-In-Residence
15. "Rent a CxO" and turn-key management capacity for qualifying early stage concepts and firms
16. Serial Entrepreneur Fellows – Global Attraction Program
17. Professional Services matching and pro bono bank
18. Place-making and infrastructure such as i-TOD efforts to build a critical mass and a competitive set of locations
19. Branding and image coordination
20. Key labor matching and procurement programs
21. Technology training programs (i.e. CCSU, CC)
22. State, regional and hub based networking programs

Programs were selected and then prioritized by a process of expert surveys...

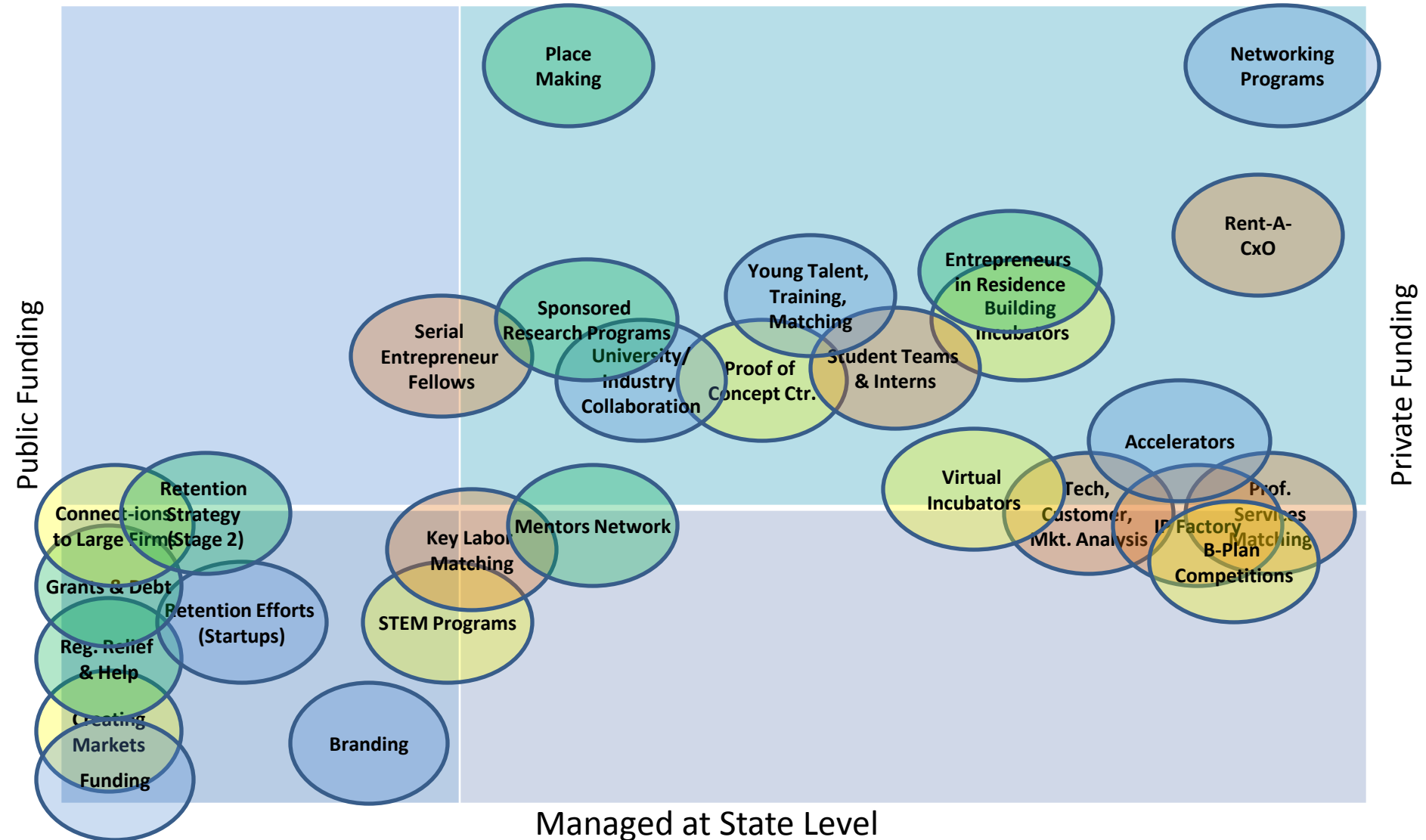
Look at all the programs in the state



Group ranked the programs on key attributes

Managed at Hub Level

Managed at State Level



- ❖ Studies done, Startup Connecticut is now designing a system to promote growth and innovation. Its guiding ideas are:
 - Entrepreneurs and CEOs involved
 - All systems agile and helpful
 - Data collected and analyzed
 - A private/NGO driven process
 - Public support where needed

- ❖ Build hubs that contain various pieces of the ecosystem and share some state-wide services and programs

Building an functioning ecosystem

Assets that contribute to the success

sources of new
companies
list of existing
smaller firms

Organize efforts
to help build and
guide startups

Retain firms and
continue to help

Rigorously set goals, track progress and analyze results

Build a model for a new ecosystem

Create and manage for outcomes, not activities

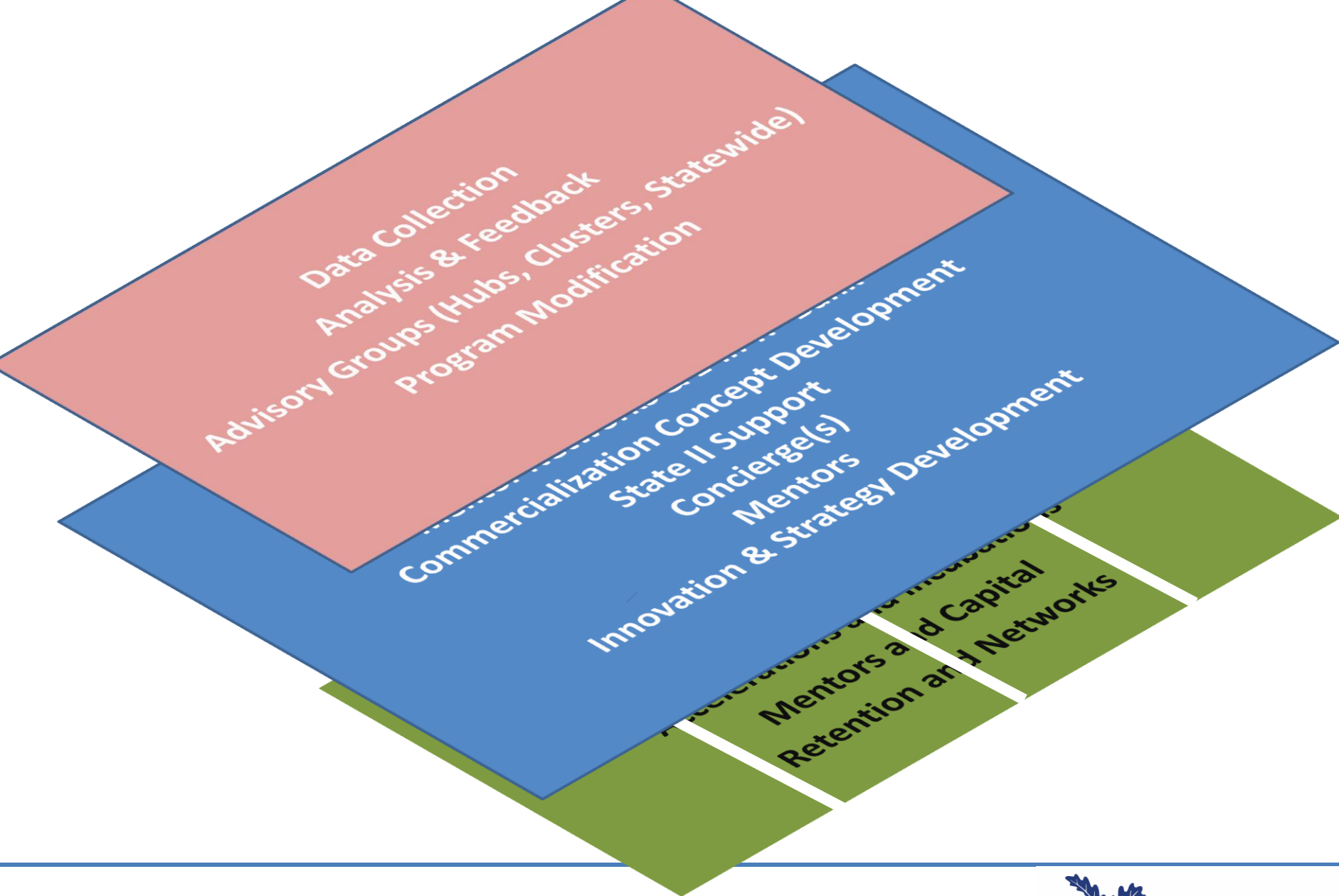
Minimize overhead, maximize agile, targeted and analyzed resources



Flow of Ideas > concepts > companies

Pool of resources > people > networks

Philosophy and overview



Oversight layer of the ecosystem

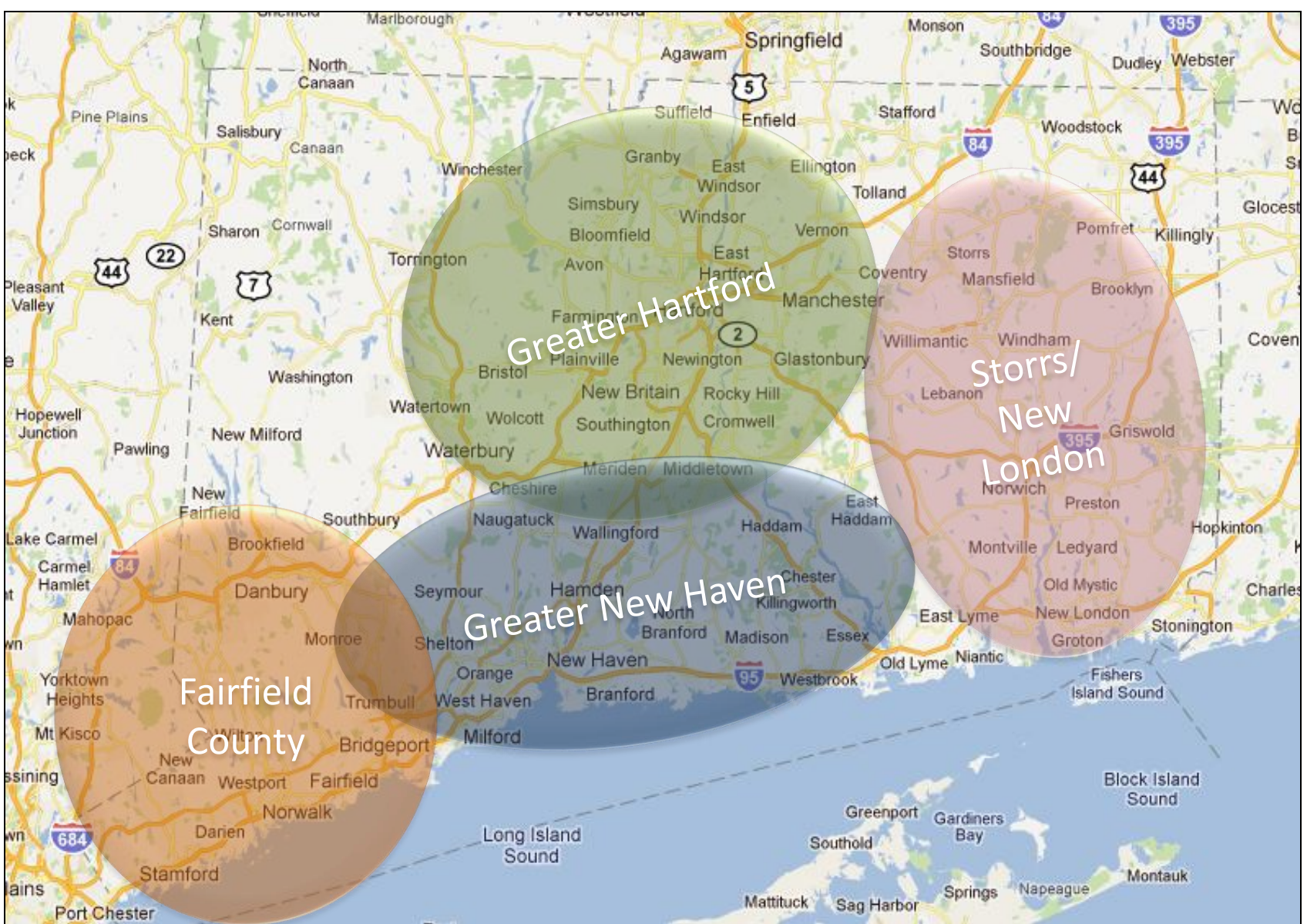
Statewide Startup Support—
Business Plan Competition (Large – Annual)
Mentor Networks & E-in-R “Bank”
Commercialization Concept Development
State II Support
Concierge(s)
Mentors
Innovation & Strategy Development

Statewide layer

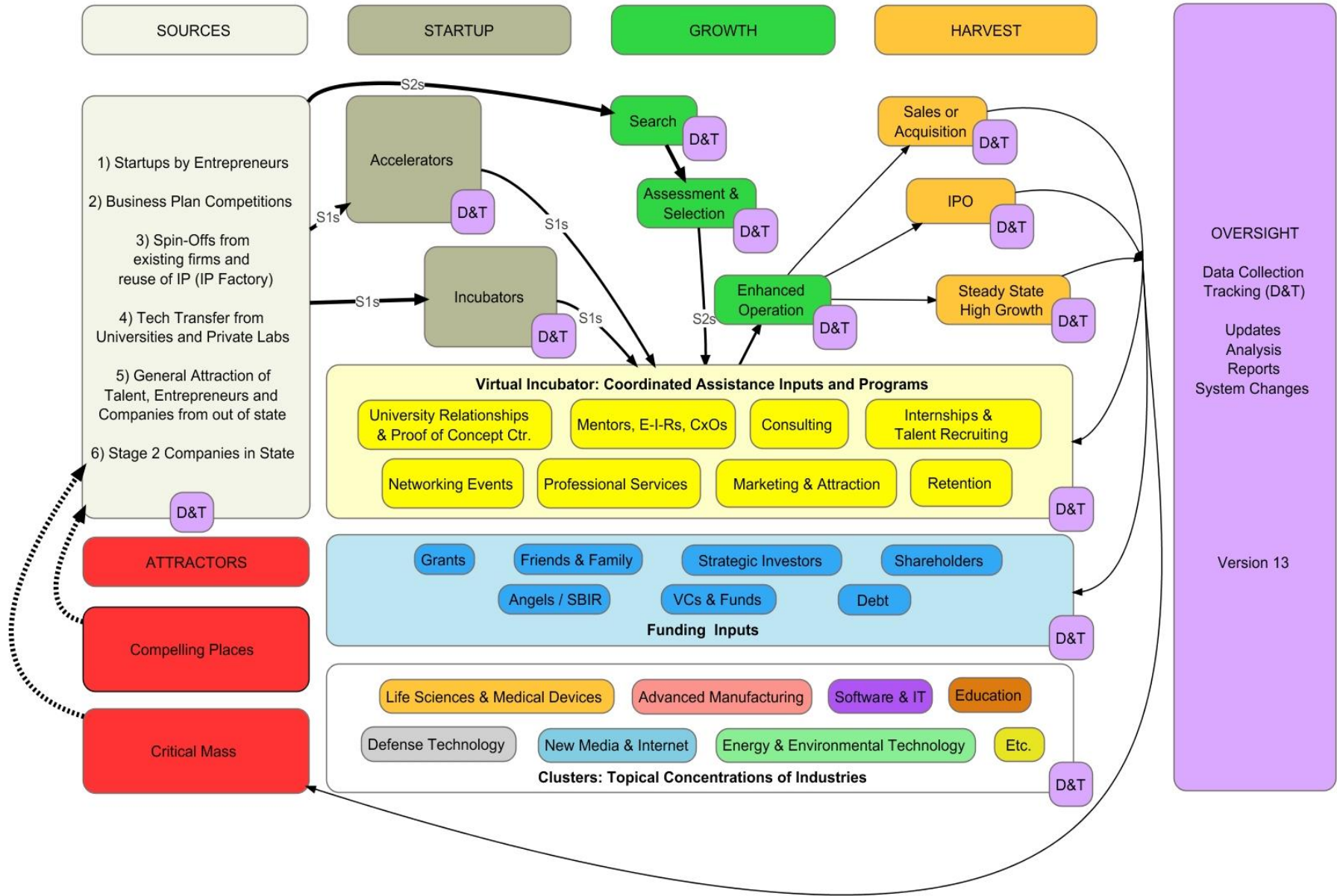


The Hubs
Attracting concepts and startups
Triage and selection
Accelerations and incubations
Mentors, E-I-Rs, vouchers and Capital
Retention and networks

Hub layer



The geography of the system



Details: Innovation model blueprint

SOURCES

- 1) Startups by Entrepreneurs
- 2) Business Plan Competitions
- 3) Spin-Offs from existing firms and reuse of IP (IP Factory)
- 4) Tech Transfer from Universities and Private Labs
- 5) General Attraction of Talent, Entrepreneurs and Companies from out of state
- 6) Stage 2 Companies in State

D&T

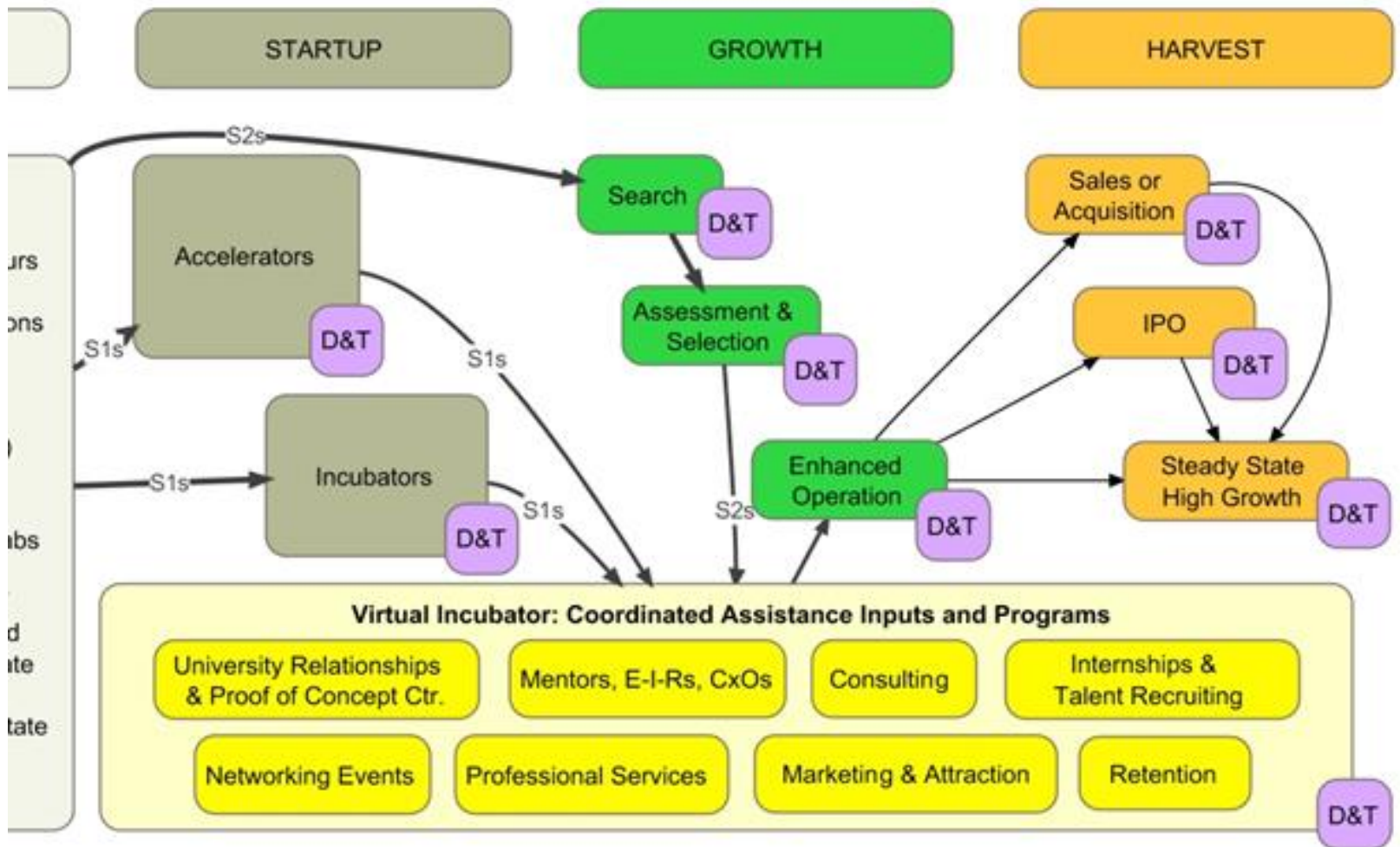
ATTRACTORS

Compelling Places

Critical Mass

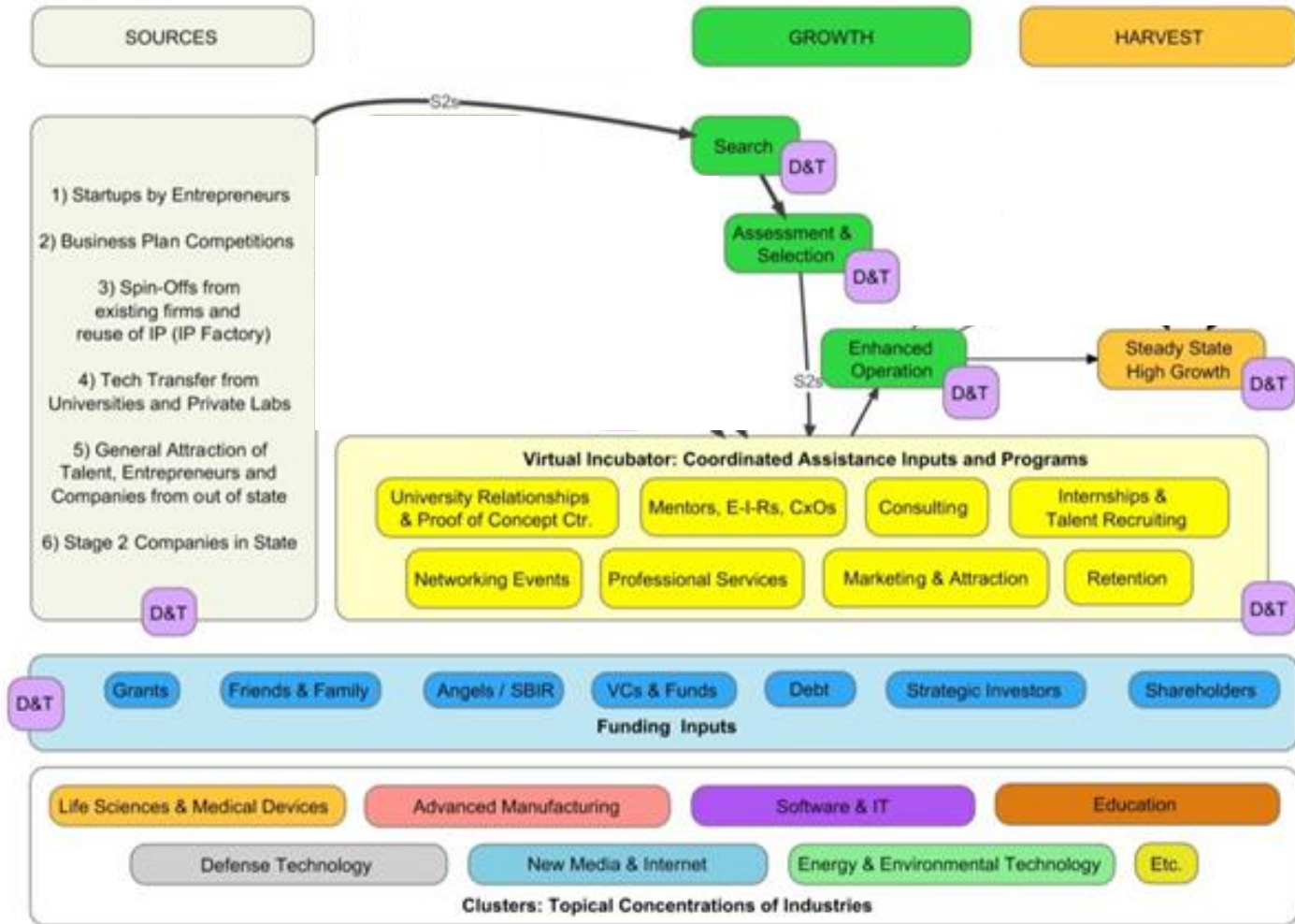
With sources...





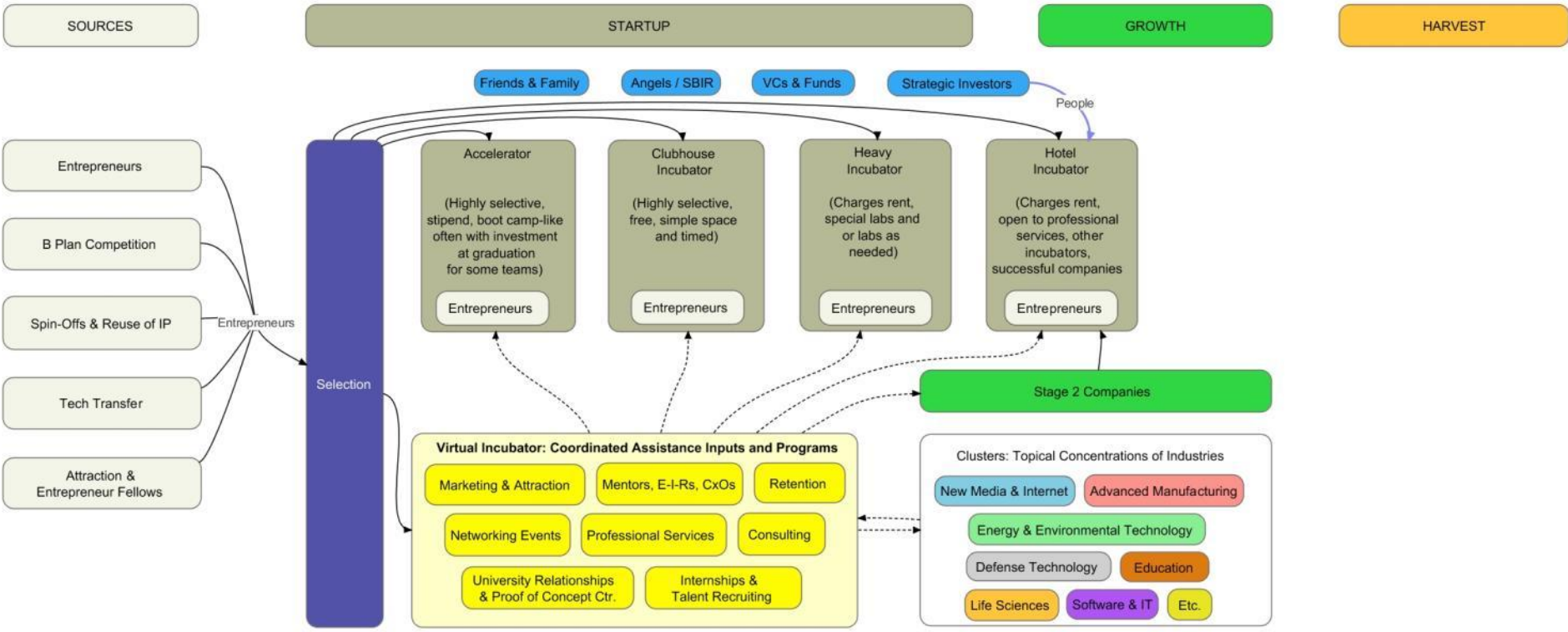
..and operations explained

The Connecticut Innovation Ecosystem



The model designed for stage 2, too

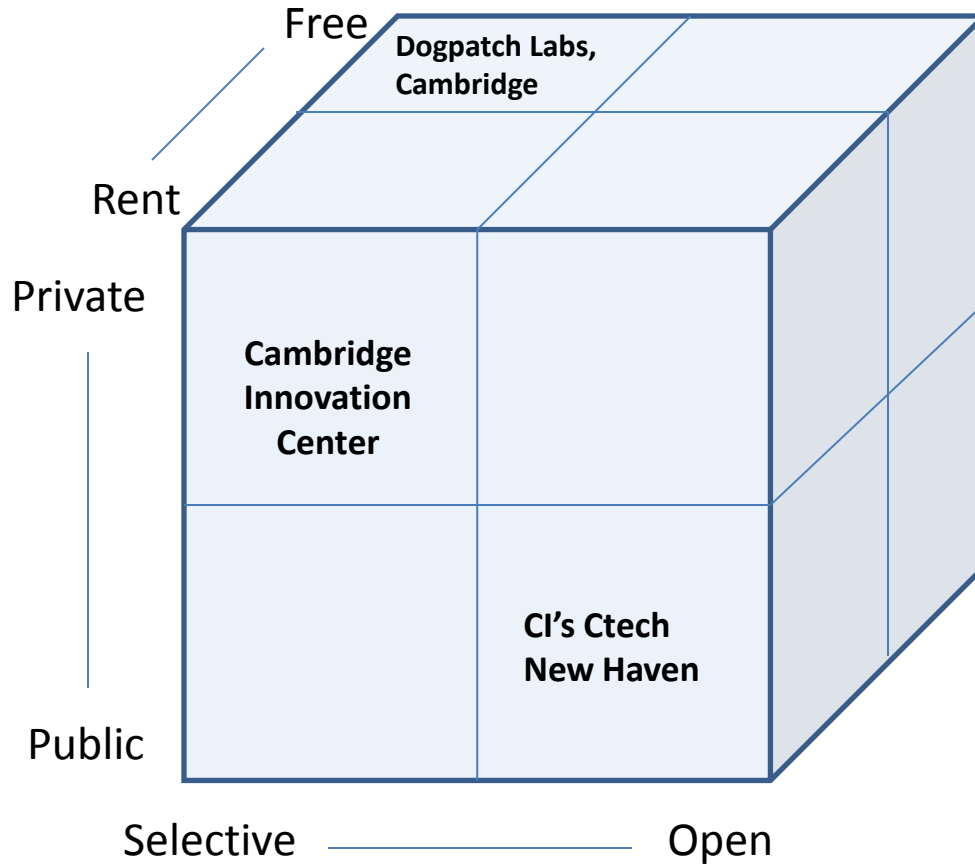
Hub Model



Model how the Hubs might work



An example of a model of incubators: each program area should be subjected to this kind of analysis



Add conceptual ways to view programs

• Selectivity	Open	-----	Selective
• Rent	Market	-----	Free
• Time	Untimed	-----	3 Months
• Investment	No	-----	Yes
• Assistance	None	-----	Lots
• Community	Loose	-----	Tight
• Location	Suburban	-----	downtown
• Size	<10	-----	>100.

An example of how to analyze programs



Stage 1 (Start-up) Goals		Class	Class	Class	Class	Class	
		1	2	3	4	5	
Year 1 Results	Designated new High Potential Firms	50					50
	Total new Start-ups in CT	250					250
	Valuation \$1M per HiPo company	\$50					\$ 50
Year 2 Results	New & remaining High Potential Firms in Class	35	50				85
	Total new Start-ups in CT	125	250				375
	Valuation \$5M	\$ 175	\$50				\$ 225
Year 3 Results	New & remaining High Potential Firms in Class	25	35	50			110
	Total new Start-ups in CT	65	125	250			440
	Valuation \$10M	\$ 250	\$ 175	\$50			\$ 475
Year 4 Results	New & remaining High Potential Firms in Class	18	25	35	50		128
	Total new Start-ups in CT	32	65	125	250		472
	Valuation \$20M	\$ 360	\$ 250	\$ 175	\$50		\$ 835
Year 5 Results	New & remaining High Potential Firms in Class	13	18	25	35	50	141
	Total new Start-ups in CT	16	32	65	125	250	488
	Valuation \$40M	\$ 520	\$ 360	\$ 250	\$ 175	\$50	\$1,355

EXAMPLE ONLY

Assuming 30% decline a year in high potential firms, a 50% decline in number of all start-ups and certain % increase in valuation of high potential group

Needs details for useful multi-year goals



Stage Two (20,000 firms 11-100 employees) Process in place to select group to highlight		Class 1	Class 2	Class 3	Class 4	Class 5	
Year 1 Results	Selected new High Potential S2 Firms	75				75	
	New jobs 1 per company selected	75				75	
Year 2 Results	Selected new High Potential S2 Firms	75	75			150	
	New jobs 2 per company selected	150	75			225	
Year 3 Results	Selected new High Potential S2 Firms	60	75	75		210	
	New jobs 3 per company selected	180	150	75		405	
Year 4 Results	Selected new High Potential S2 Firms	60	60	75	75	270	
	New jobs 4 per company selected	240	180	150	75	645	
Year 5 Results	Selected new High Potential S2 Firms	50	60	60	75	75	320
	New jobs 4 per company selected	200	240	180	150	75	845

EXAMPLE ONLY

Different goals for Startups & Stage 2s



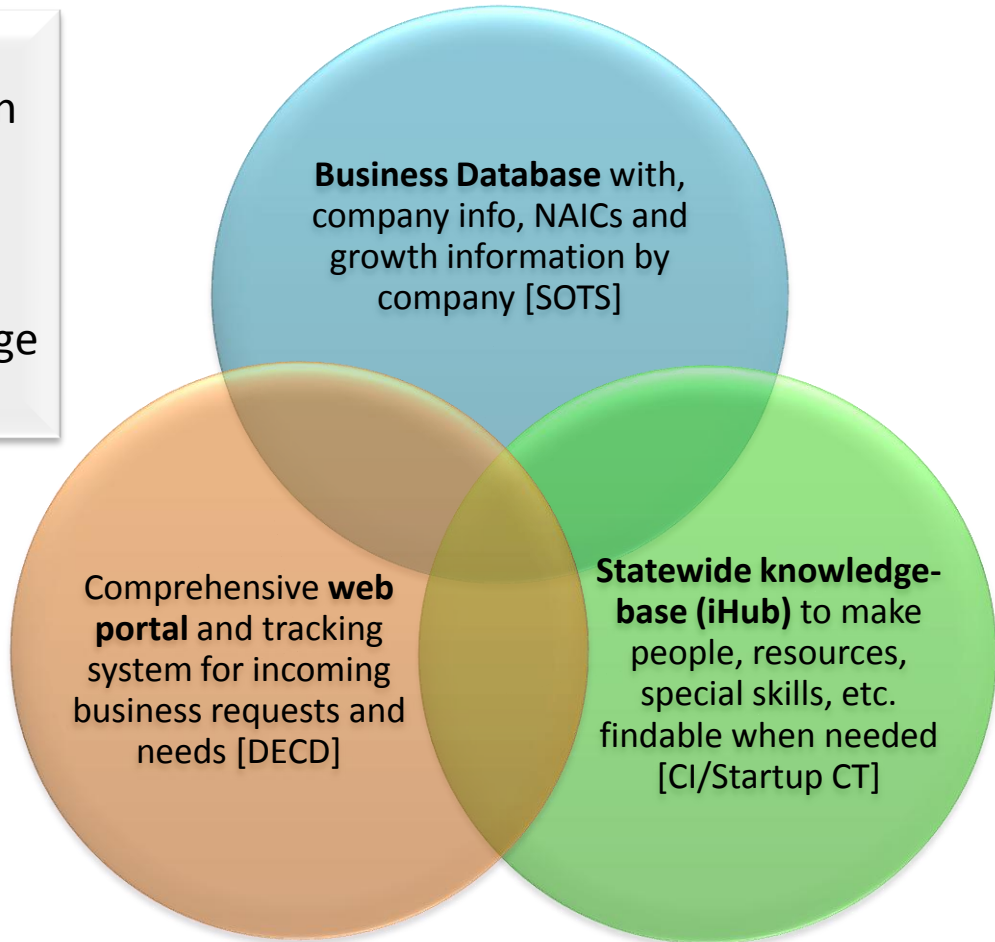
Tracking Systems For Startup Connecticut Innovation Ecosystem

Track goals Hubs & programs: objectively & subjectively

Cluster Advisory Groups

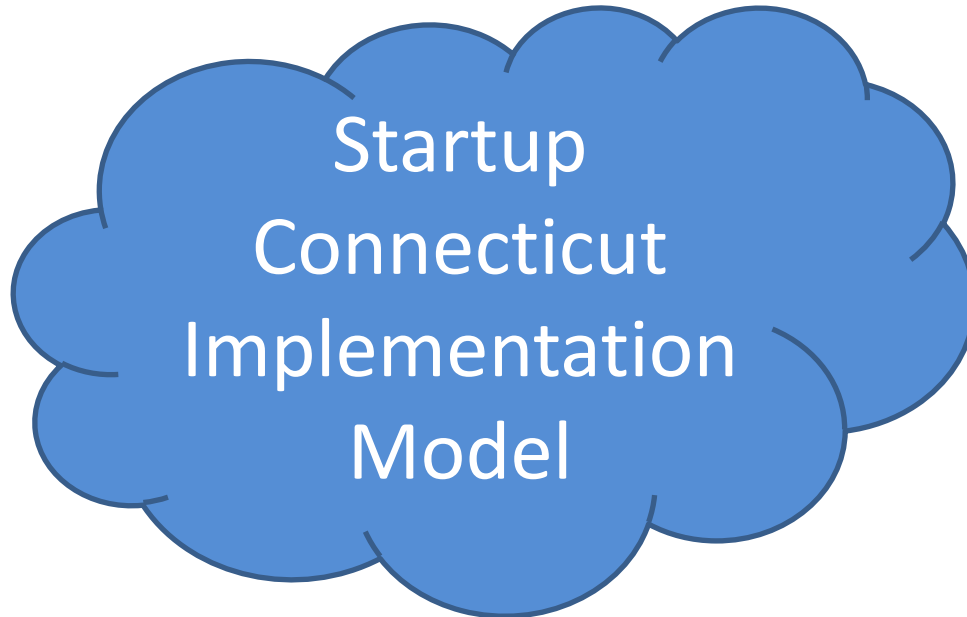
<Data Collection

Portals, DBs and Knowledge base>



Interconnected tracking systems

To come...



One more major effort before launch

Draft – Please do not forward or copy



- ❖ Gain approval by DECD, Governor & Legislature (accomplished)
- ❖ Refine model
- ❖ Define relationships
- ❖ Create budgets
- ❖ Solicit RFPs
- ❖ Assign roles and contracts
- ❖ January 1, 2012 - begin operation of Startup Connecticut

Next steps...



Reaction and discussion – panel and audience

- Register to help
 - www.startupamericapartnership.org or www.startupct.org
 - Facebook, Twitter, LinkedIn groups and feeds
- Engage in your local startup community
 - Startup Weekends
 - Startup Meetups
 - Business plan competitions
- Help your fellow entrepreneurs
 - Build advisory boards for one another
 - Help companies in adjacent spaces
- Become a Startup Connecticut technology mentor

Make it not just about you and your firm
– help build the ecosystem

Call to Action



STARTUP
AMERICA
PARTNERSHIP



ПАРТНЕРШІП
АМЕРІКА
STARTUP

**Is a national effort that will
bring resources and
contacts in other states to
Startup Connecticut**

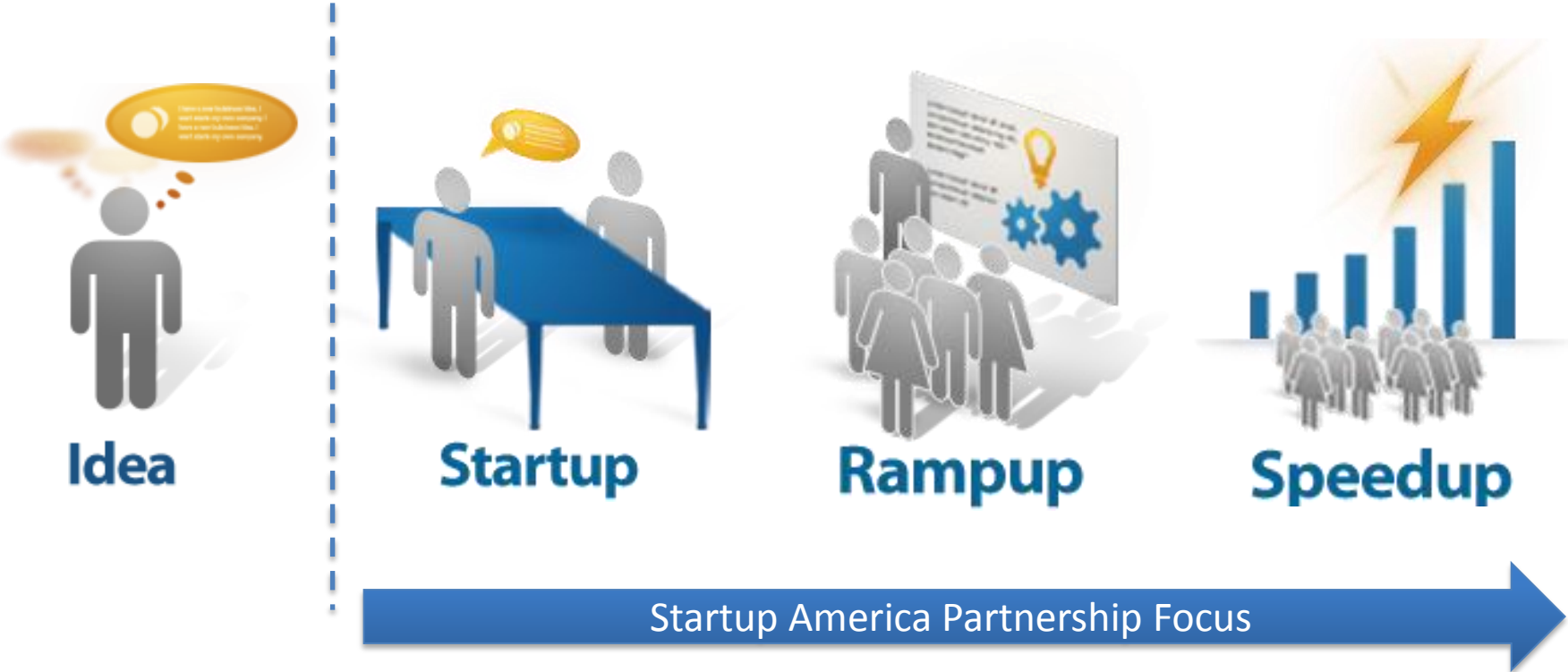
- **What is the Startup America Partnership**
 - A movement by entrepreneurs, for entrepreneurs – launched 1.31.11, at the White House to help inspire and celebrate entrepreneurs
 - An independent, private sector entity – leveraging the work of our close partners in the U.S. government, but with the fierce freedom and agility that define American Startups themselves
 - An organization focused on bringing private sector together to maximize the success of America's entrepreneurs and thus maximizing America's global competitiveness.

Our Mission



**STARTUP
AMERICA**
PARTNERSHIP

While we are taking steps to encourage the creation of new startups, our principal focus is on supporting the entrepreneurs who are leading existing firms with high-growth potential (what we call “speedups”).



Our “Customers”



**STARTUP
AMERICA**
PARTNERSHIP

Our principal focus will be on supporting the entrepreneurs who are leading existing firms with high-growth potential. We will do this by assembling Partner Offerings in the following areas:

Expertise



Services



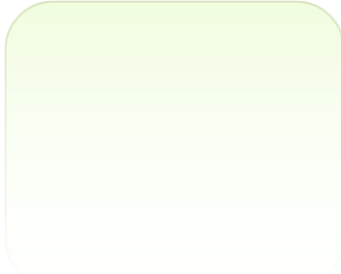
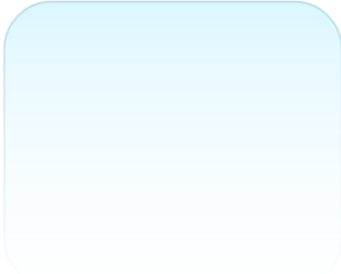
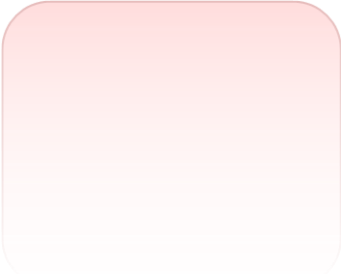
Talent



Customers



Capital



Capability Areas



**STARTUP
AMERICA**
PARTNERSHIP

We are encouraging leaders in the entrepreneurship community to come together at the local and regional level and rally around the principles of Startup America – through the creation of their own *Startup cities, states or regions*

Critical Attributes

- **Entrepreneurs as Leaders**
- **Specialized Intermediaries**
- **Engagement**
- **Network Density**
- **Government**
- **Talent**
- **Big Companies**
- **Support Services**

Current Regions



Startup Regions as 10/6/11





STARTUP
CONNECTICUTSM
entrepreneurs create jobsSM

Please send us your comments to:
www.Startupct.org