

State of the Life Sciences Industry

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Deloitte.



Deloitte Real Estate and Location Strategy Practice

Market Entry	Site Selection & Location Strategy	Real Estate & Incentives	On-shoring & Off-shoring	Footprint Optimization	Program Delivery & Management (PMO)
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Deloitte's Capabilities

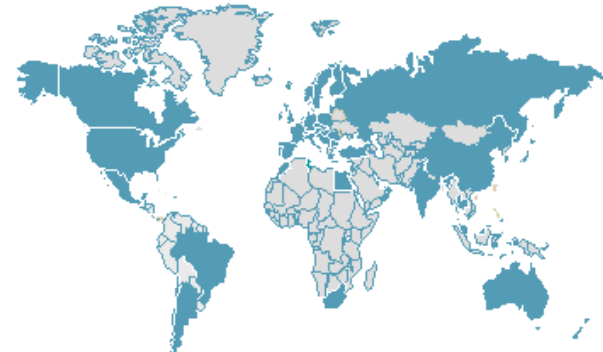
- **Over 8,000 site selection projects** completed since practice founding 1919
- **Largest site selection consultancy** built to advise clients on the most complex location strategy and site selection decisions
- **A dedicated team of 25+ practitioners focused on global location strategy and site selection**
- Deep understanding of issues critical to optimal location decisions:
 - Variable operating costs, conditions, and risks
 - Labor market quality & availability
 - Logistics/supply chain/infrastructure issues
 - Utilities infrastructure and issues
 - Real estate and site issues
 - Taxes and incentives

Sample of Recent Engagements

- Amgen- Asia operations market entry
- Express Scripts - North American deployment strategy
- Alcon/ Novartis- European country headquarter location
- Herbalife - US and EMEA deployment strategy
- Dendreon- Europe collection center location strategy
- Johnson & Johnson- China manufacturing strategy
- Novartis- US manufacturing location strategy
- Biomarin- Global manufacturing strategy
- Stryker- Asia manufacturing location strategy

Global Expertise

- **On the ground experience in over 60 countries worldwide**



The Life Sciences Industry



Primary Investment Areas of Life Sciences

Pharmaceutical



Medical Devices



Biotechnology

Issues & Challenges to Medical Devices focus on thinning margins

Highly competitive sector

- Margin pressures (low cost country sourcing, global effective tax rate)
- Compressed product lifecycles
- Cost v. quality risks
- Product differentiation
- Market segmentation
- New markets (China, India, Brazil)
- Exchange rate risk
- Supply chain costs
- Eroding labor cost arbitrage
- Changing regulatory environment

Issues & Challenges for Pharmaceuticals- shifting evolving technology and therapies

Mature fragmented sector

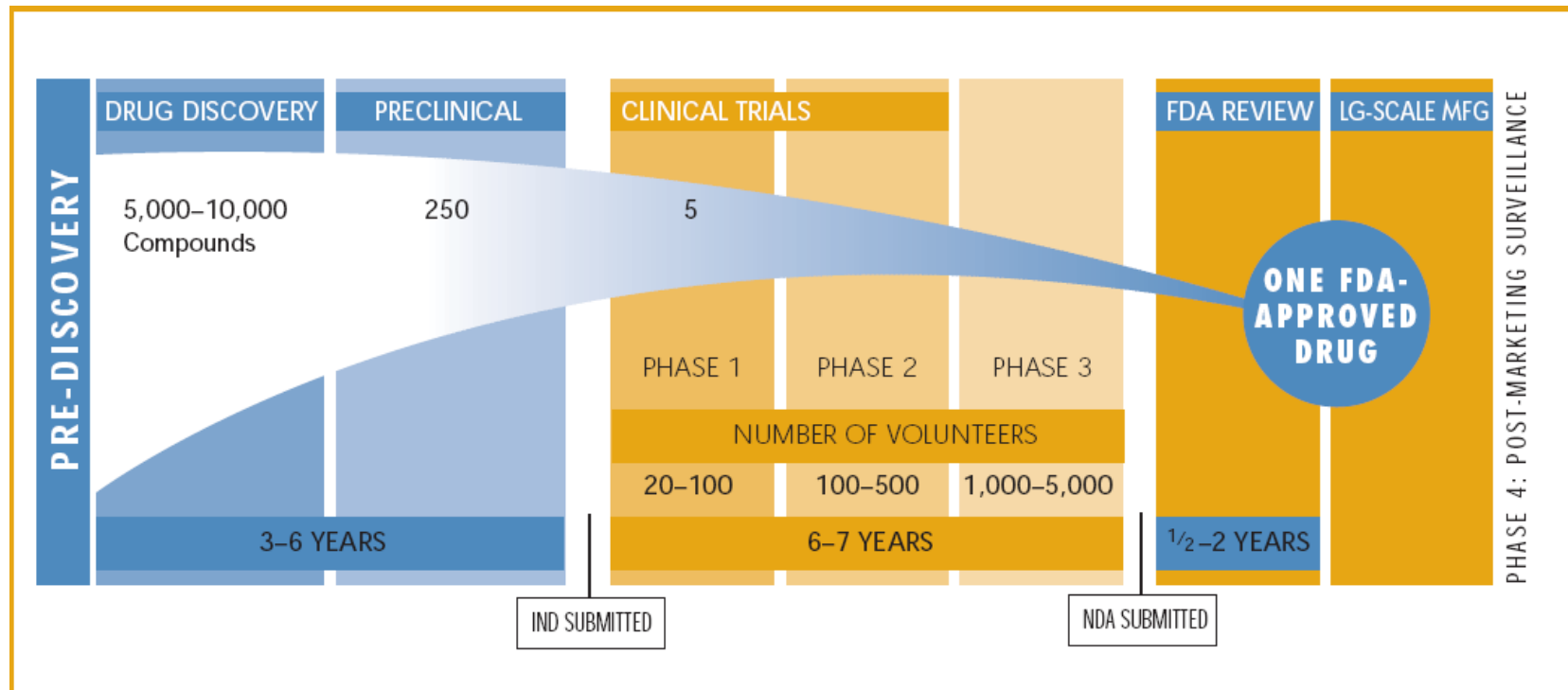
- Cash-rich sector
- Pricing pressure from patients and healthcare system
- Excess manufacturing capacity and aging facilities
- Product specific facilities that lack flexibility
- Un-reconciled post-acquisition/merger operations
- Competition from contract manufacturers and research organizations
- Shift to low volume targeted therapeutics
- Weak pipeline for new products
- Emergence of generics and OTC products
- Recent manufacturing quality issues
- Changing regulatory environment
- New technologies required for future products
- Uncertain and dynamic market demand

Issues & Challenges – Biotechnology driven by ability to finance R&D

Young rapidly growing sector

- Lack of access to capital
- Pricing pressure from patients and healthcare system
- Manufacturing capacity for “blockbuster” products
- Shift to low volume targeted therapeutics
- Risk mitigation
- Access to emerging markets
- Weak pipeline for new products
- Emergence of biogenerics in Europe and Canada
- Competition from low cost manufacturers
- Limited CMO capacity
- Changing regulatory environment
- Increase in orphan drugs
- Uncertain and dynamic market demand

The cost, time, and risks associated with drug development continue to increase

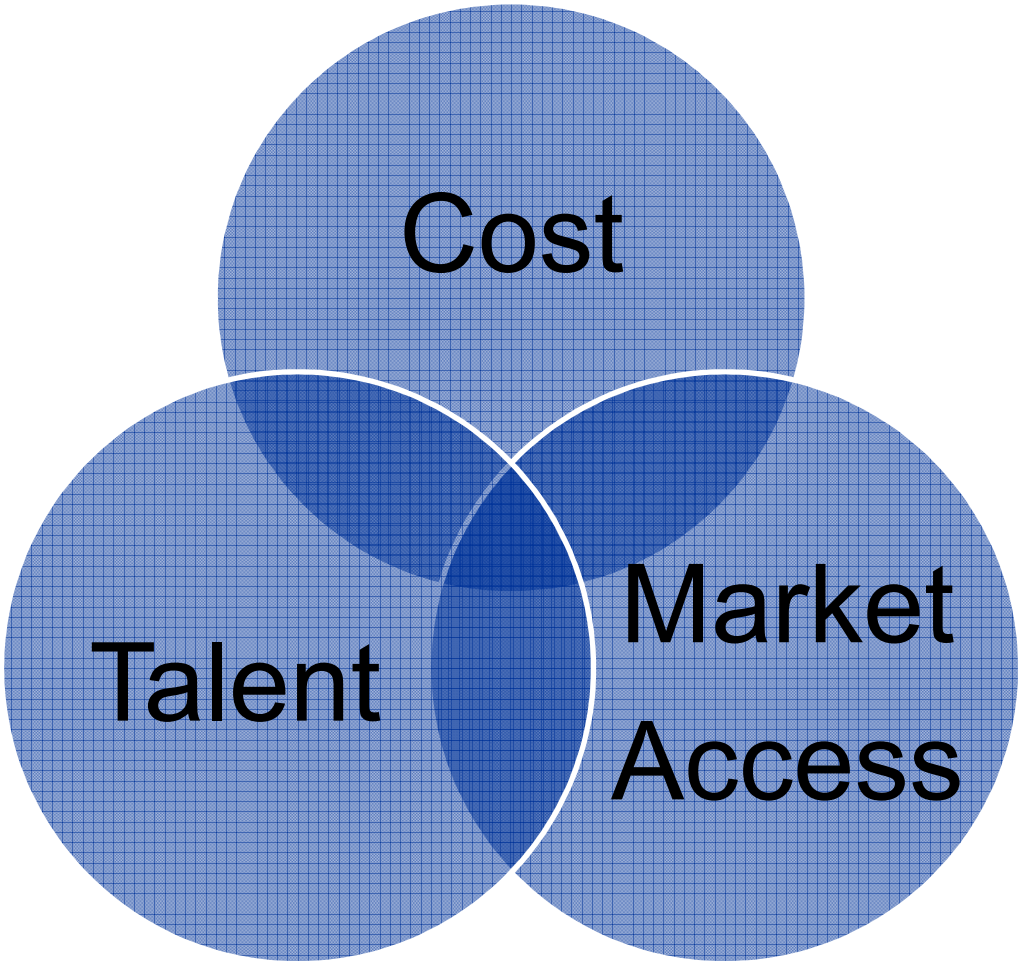


- Successful drug development consumes a tremendous amount of time (10-15 years), requires an extraordinary investment (M\$800 – B\$1.8 per compound) and is associated with an inordinate amount of risk.

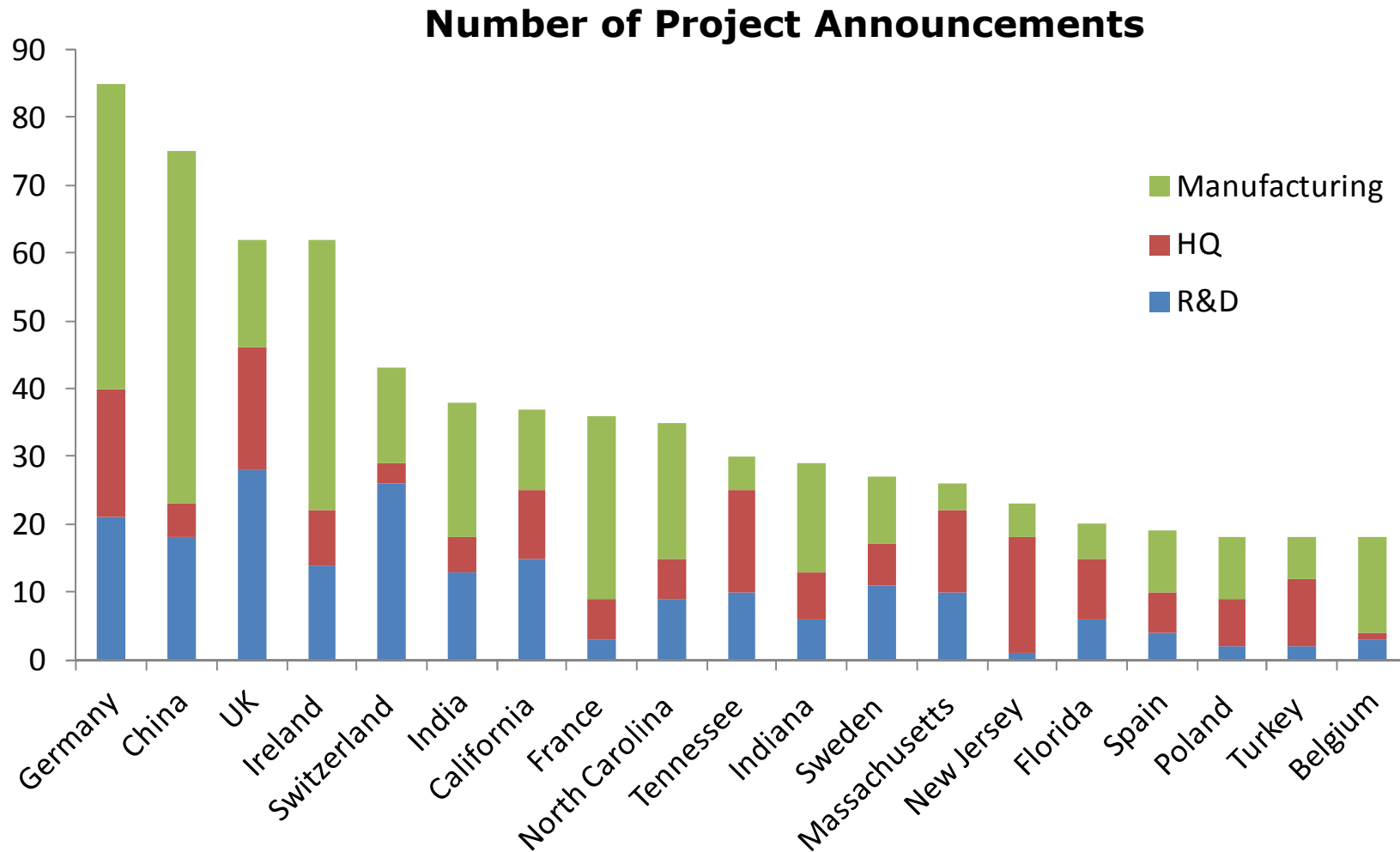
Investment Trends



Location Expansion Divers

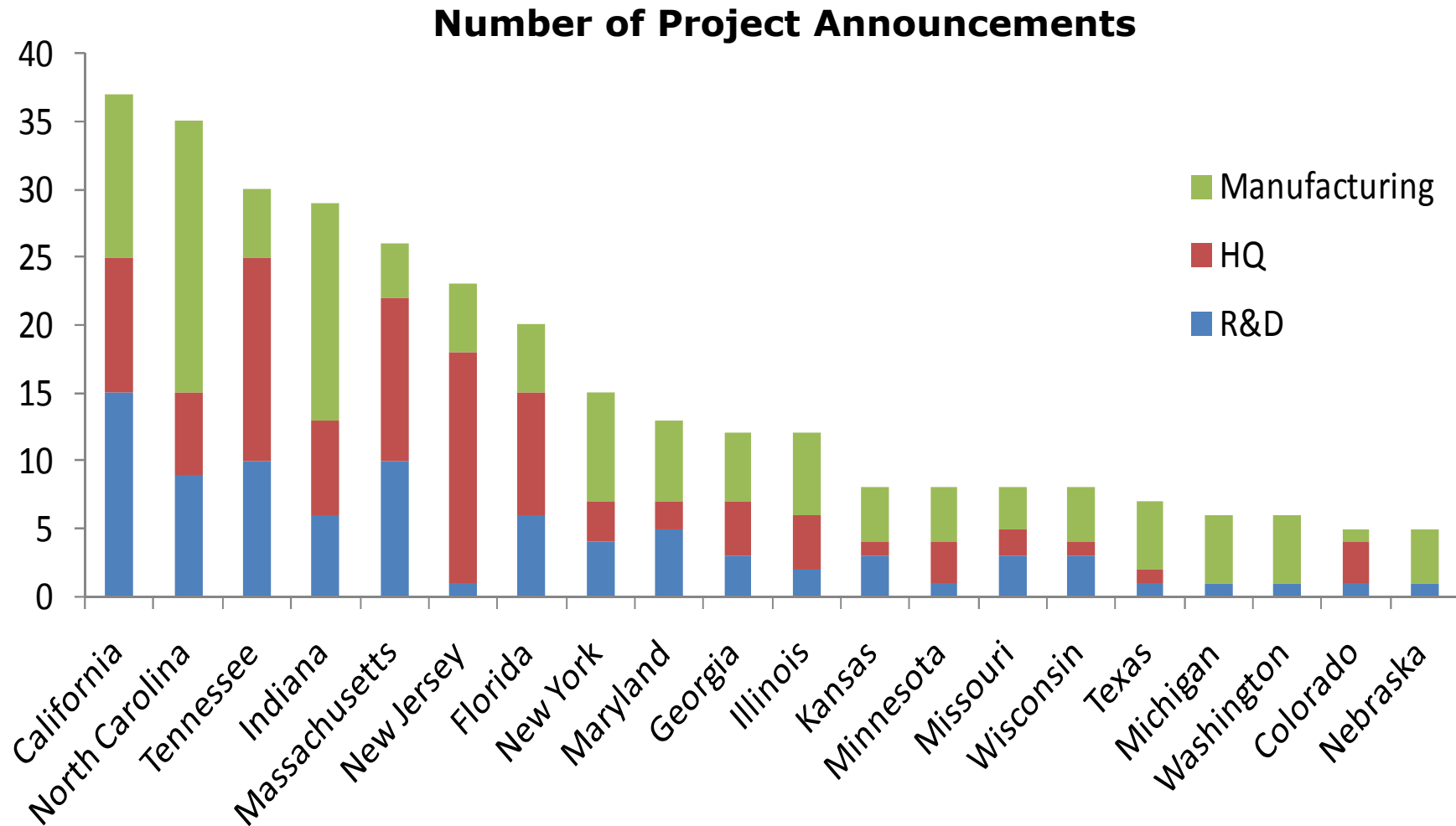


Global Life Science Investment Announcements 2008- 2011 (top 20 global)



Source: FDI Monitor, November, 2011

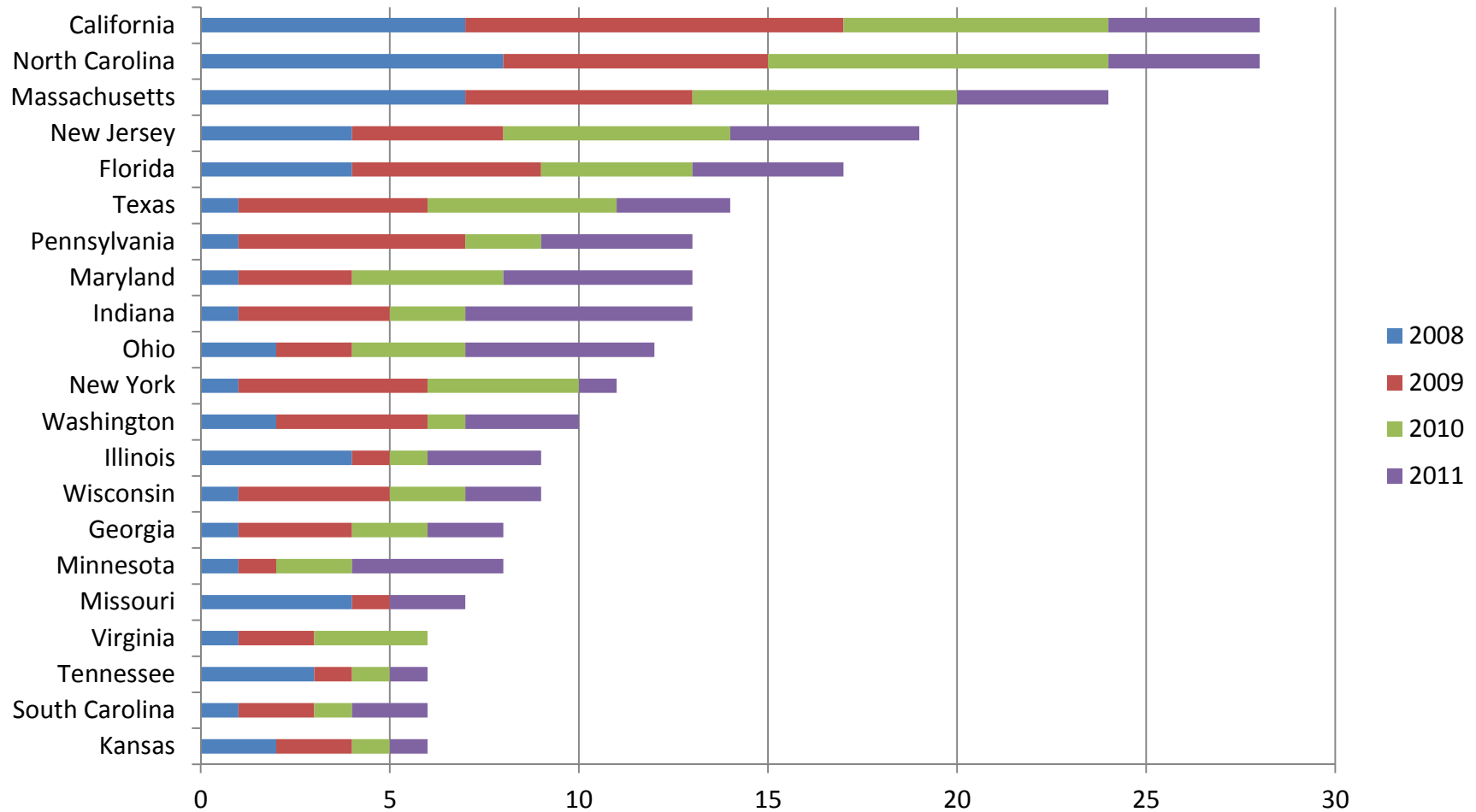
US Life Science Investment Announcements 2008- 2011 (top 20 US)



Source: FDI Monitor, November, 2011

US Life Science Investment Trend 2008- 2011 (top 20 US)

Number of Project Announcements



Source: FDI Monitor, November, 2011

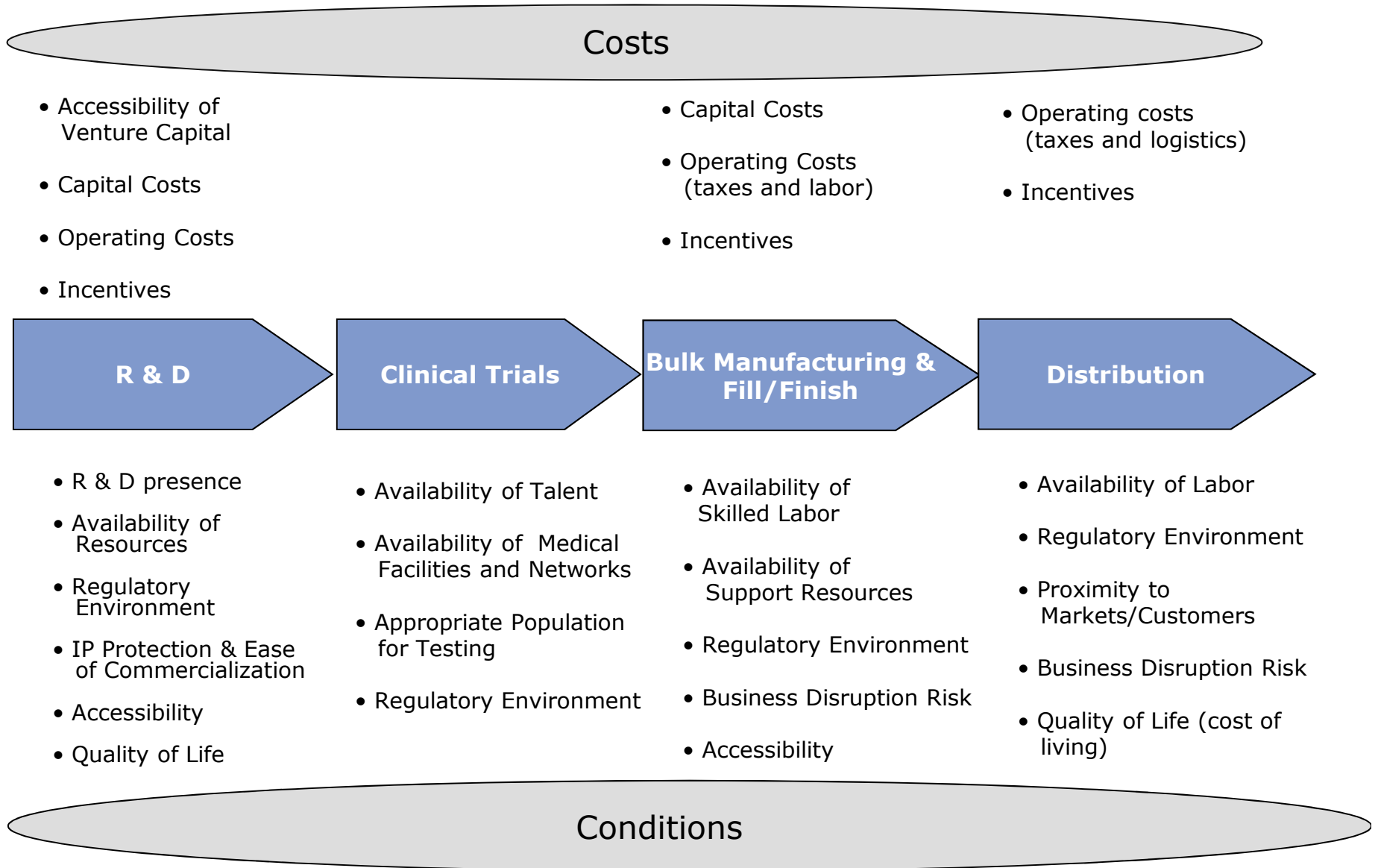
Implications for Economic Development



————— **“Know your clients”** —————



Life science value chain – Site Selection key attributes



————— **“Address your clients key issues”** —————



Develop incentives programs that address key issues

Incentives programs should be tailored to address the key issues of the segments of the value chain targeted. Across all segments the underlying theme should focus on risk reduction.

R&D

- Access to venture capital
- Provision of facilities – i.e. labs
- Relocation assistance
- Recruiting and training assistance

Manufacturing & Distribution

- Favorable state tax structure (single sales factor)
- Capital cost subsidization/deferral
- Flexible local tax structure (property taxes)
- Recruiting assistance
- Relocation assistance
- Industry specific training assistance
- Fast track permitting
- Access to capital

— “Have something to say and somewhere to say it” —



Develop a compelling brand and build eminence

An effective brand is...

- Based on area attributes
- Relevant to industry sector
- Positioned relative to competitors
- Cohesive

Channels to build eminence include...

- Industry trade publications
- Business publications
- Airline magazines
- Websites
- Hosting industry symposiums
- Familiarization tours
- Selected trade shows
- Targeted trade missions

Focus on short-term issues but plan for long-term success

Reinforce relationships and network

- Stay close to your indigenous companies – listen to issues
- Leverage higher education networks – connections to industry

Be creative

- Innovative financing programs
- Utilize local technical schools and education programs to provide training programs
- Provide consulting services
 - R&D through educational institutions
 - Cost reduction analyses
 - Recruiting and outplacement
 - Energy conservation
 - Sustainability/“Green” programs
- Wage subsidies

Position for the future

- Develop sector based strategy and programs
- Build brand and organization

“Be Prepared for What’s Next”

Q & A

