

“ALL-Hands-On-Deck” to Boost State Economic Growth

- Growth will need to accelerate sharply to undo the damage caused by one of the worst recessions in modern times
- America gradually losing its pre-eminent position in innovation
- Mature industries needing to upgrade to realize growth potential
- Widespread abandonment of properties occurring in states and cities
- Education producing too many workers who have low skills, poor skills, or the wrong skills

Five Roles for Arts, Culture and Design

- Providing the core of a fast-growth, dynamic industry cluster
- Helping mature industries become more competitive (tourism, manufacturing)
- Providing the critical ingredients for innovative places
- Catalyzing community revitalization
- Delivering a better-prepared workforce

Providing a Fast-Growth, Dynamic Industry Cluster

Breaking down the creative industries cluster

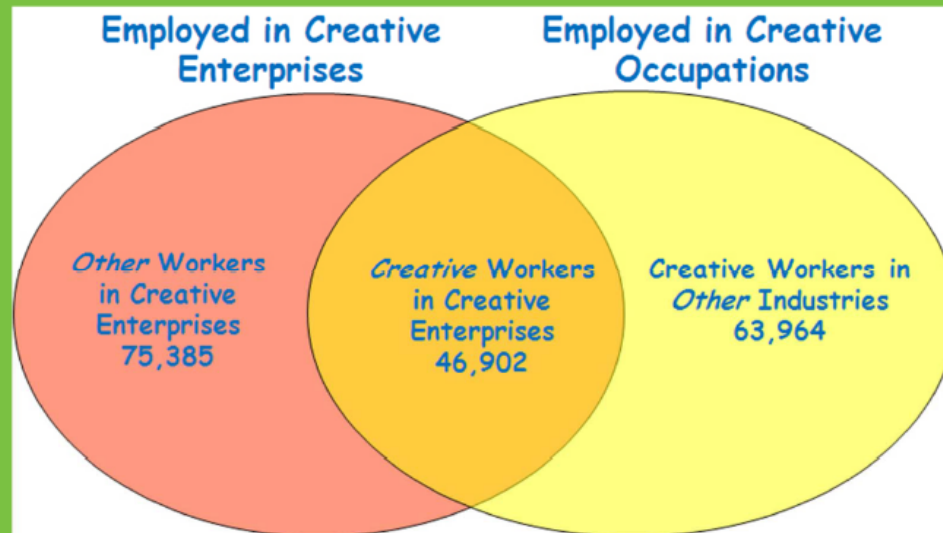
Product & environmental design	Entertainment & media	Visual arts & crafts, and performers	Literary & publishing	Cultural heritage & preservation	Culinary arts
Interior design Architects Advertising Landscape Arch Floriculture Ornamental Metalwork Graphic design	TV/Cable Motion picture Internet broadcasting Radio stations Sound studios CD stores	Indep. artists Photography Galleries Art dealers Art foundries Print reprod. Art schools	Writers Publishers Book stores Agents Printers News media	Museums Historic sites Grant makers Restoration	Cooking schools Ethnic restaurants Fine restaurants



Governor's 2011 Colorado Blueprint includes arts, culture and creative industries

Colorado: State-of-the-Art

186,251 Jobs



What States Are Doing

- Examining the economic importance of the creative industry cluster—and finding it to be a vital source of jobs and income, as well as a good “brand”
- Crafting strategies to promote growth and profitability of creative enterprises, as part of state ED strategy
- Including state arts councils and similar organizations as part of the state’s ED infrastructure
- Reviewing the business incentives, financing programs, and entrepreneurial assistance available and refining guidelines to make them more available to state’s artists and creative businesses

More Competitive



Innovation: Engineered vs Designed

- **Engineering as problem solving:** Engineers are problem solvers. “This device breaks down when you use it for a long time, so we’ll beef up the strength of this weak section”
- **Design is creating:** “The designer, on the other hand, has a passion for doing something that fits someone’s needs, but that is not just a simple fix. The designer has a dream that goes beyond what exists, rather than fixing what exists.”

David Kelley, founder of IDEO

iPod shows the way

- **7 of most expensive inputs supplied by 7 different companies, headquartered in 4 different nations with manufacturing locations in 5 different countries:**
 - **2 US: Broadcom and Portal Player**
 - **5 Asian: Toshiba, Toshiba-Matsushita, Inventec, Renesas, Samsung**
 - **Most suppliers manufacture parts in Asian countries for cheaper costs**
- **Despite large number of countries, firms, and workers involved in producing iPod, the overwhelming majority of the product's gross margins accrue to US firms—Apple chief among them**
- **The device's 7 key inputs generate \$33 per unit in profits for primarily foreign-based firms that supply them, but Apple earns \$80 per unit—greater than the price of any single input.**
- **Apple's value generated by market knowledge, intellectual property, systems integration, cost-management skills, and brand name**

Source: Greg Linden, Kenneth Kraemer, Jason Dedrick, *Who Captures Value in a Global Innovation System? The Case of Apple's iPod*, 2007

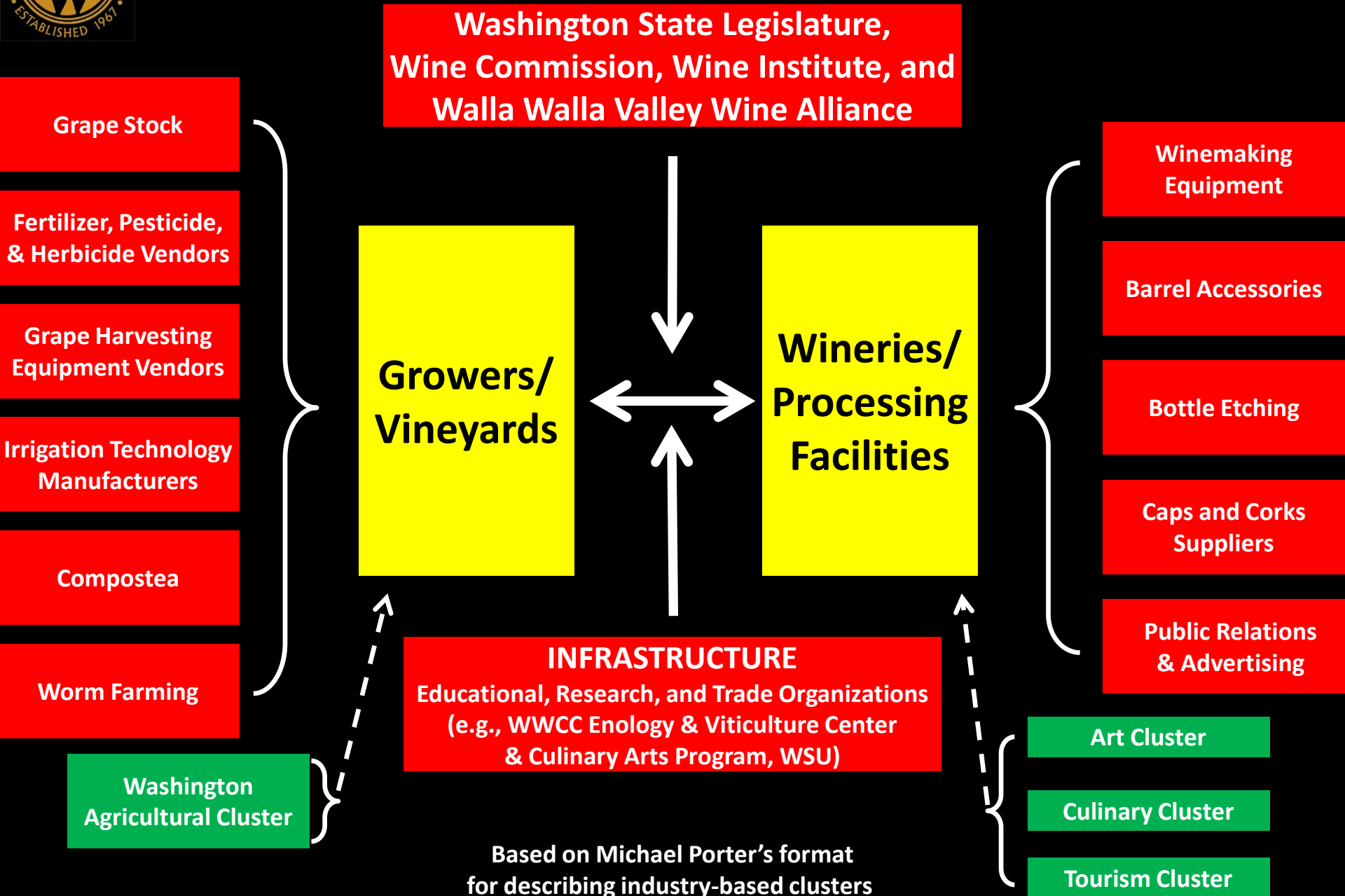


Our Vision: Wine / Food / Art





Walla Walla Valley Wine Cluster



What States Are Doing

- Exploring the links between creative talent in the state—artists, designers, new media entrepreneurs—and other important clusters to deepen those connections and improve competitiveness of traditional industries, such as manufacturing
- Creating dedicated units and expertise within community colleges, manufacturing extension centers, and agricultural extension services that focus on design (design of products, packaging, and branding)
- Boosting tourism by leveraging and marketing the unique culture and food of regions

Providing Critical Ingredients for Innovative Places



The most successful American places in the 21st century are likely to be innovation hubs. They are locations that support an open innovation business model, foster co-location, and promote easy and constant interaction among many different industries and a wide variety of creative workers, from artists to scientists to engineers.

New location priority: Spaces to Cluster, Interact and Thrive

Innovation is Place-Based

Biotech Companies Clustered in Greater Kendall Square, Cambridge, Mass.

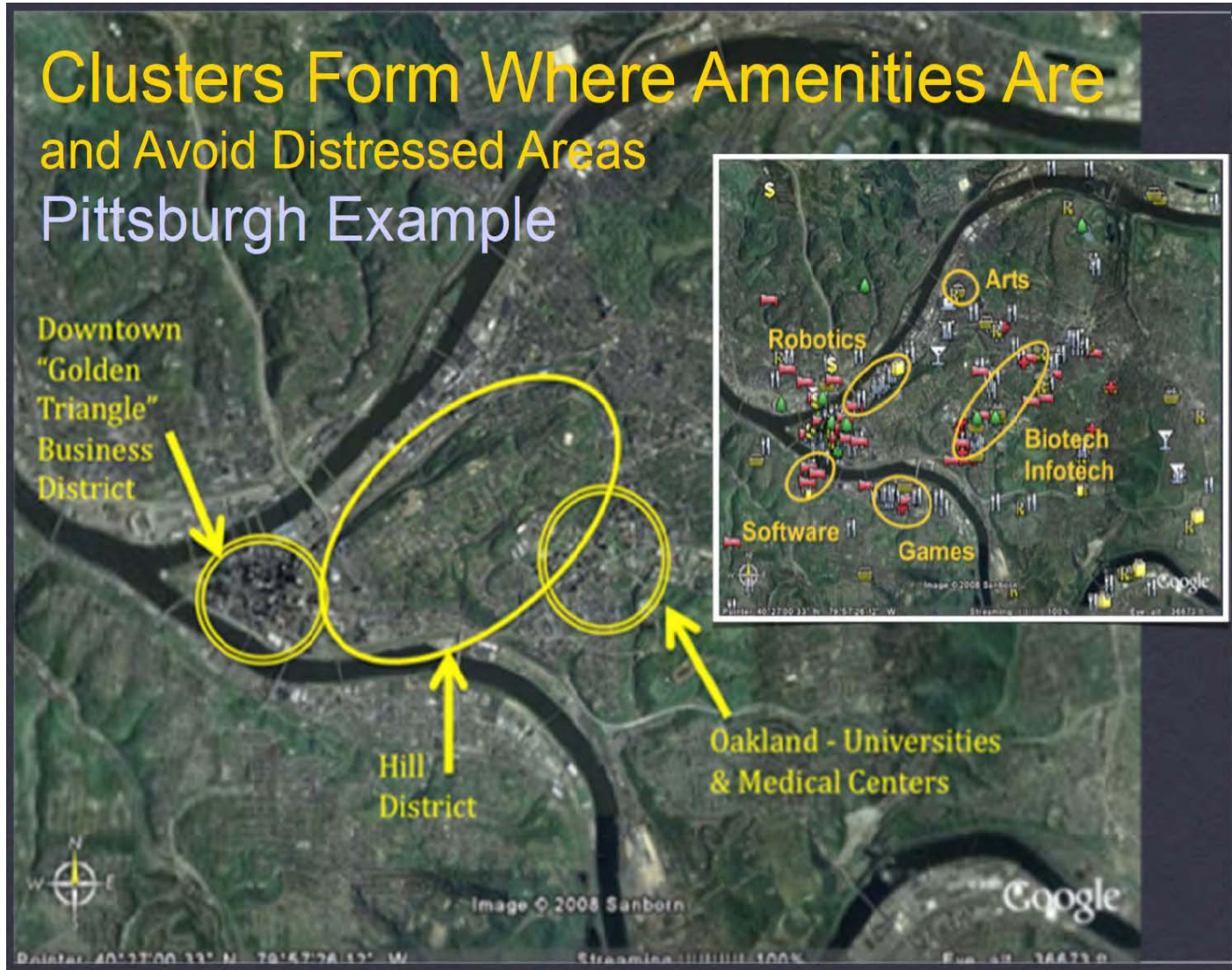


San Diego: Rise of a BioTech Cluster

- Today: 3rd Biotech hub behind San Francisco & Boston
- North Torrey Pines Road: Densely packed 2-mile stretch w/ Scripps Research Institute, Salk Institute for Biomedical Studies, UCSD
- “We can throw a rock and hit UCSD. I can hit a golf ball and hit Scripps. Everything is within walking distance. That means more heads get together and we do a lot of collaboration.”

VP at Salk Institute

Being Part of Innovative Places



A number of states are creating
Innovation Hubs,
focusing on “eds & meds” and spaces around them

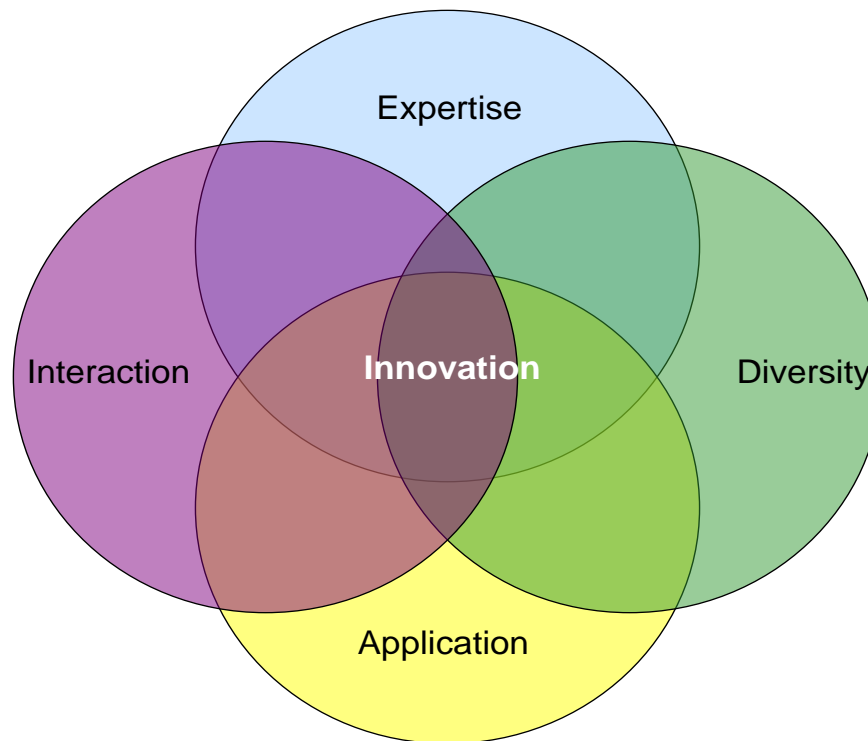


"As we envision it, Innovation Square will be unlike anything you've seen. In fact, it will be nothing short of a complete re-invention of the town square concept." - UF President Bernie Machen



Innovation Requires Four Things

The Four Components of Innovation



Strategic Framework to Drive Innovation

- **Building Expertise** by putting financial muscle behind research, building strong research capabilities and attracting world-class talent in strategic areas.
- **Organizing Interaction** by requiring collaboration among universities and others, cultivating strong networks, well-designed research facilities and compact geographical areas.
- **Linking diverse knowledge fields and cultures together** by putting people from diverse knowledge fields and cultures together to ensure that creative “sparks fly.”
- **Pushing the application and commercialization of research** by experimenting with university-industry partnerships, pioneering open IP policies and faculty tenure changes, and keeping industry engaged.

Arts, Culture and Design Play a Role in Innovation Hub

Downtown Phoenix

Seven Priority Themes

- Knowledge Anchors
- Downtown Living
- Great Neighborhoods
- Arts and Cultural Hub
- Distinctive Shopping
- Great Places/Great Spaces
- The Connected Oasis

WA Innovation Partnership Zone

The Walla Walla Wine/Food/Art IPZ includes the Port of Walla Walla's business park along with two "centers of innovation": The Port of Walla Walla and the Walla Walla Community College campus, which includes the William A. Grant Water and Environmental Center (Water Center) and the Center for Enology and Viticulture (Wine Center).

Being Part of Innovative Places

“Small Wonders”

- Active parks and trails
- Small music venues
- Small shops
- Eclectic coffee houses
- Art galleries
- Unique restaurants
- Boutique hotels
- Historic districts
- Intangibles

“Big Deals”

- Meds and Eds
- Stadiums
- Convention centers
- Symphony halls
- Shopping centers
- Master-planned communities
- National chains
- Resorts
- Industrial parks

Adapted from Morrison Institute for Public Policy

What States Are Doing

- Considering their “eds and meds” and spaces around them as places that can be designed to offer the ingredients for innovation—smart people, research institutions, professional networks, favorable intellectual property agreements, and other conditions that can help companies spur innovation
- Finding that cities, through their zoning and land use authority and their vibrant arts and cultural organizations, can catalyze or reinforce high-quality places as a competitive advantage for states in global economy
- Using tax credits and other kinds of incentives to encourage cities and developers to create cultural districts, creative corridors, innovation hubs, and other places that will attract a critical mass of creative talent and facilitate co-location, or geographic clustering of complementary businesses

Catalyzing Community Revitalization



Efforts to encourage arts and design districts and historic preservation have proved effective catalysts in turning around distressed neighborhoods.

What States Are Doing

- Supporting the use of arts and design—combined with historic preservation efforts—to turn around distressed neighborhoods
- Using tax incentives and grants to encourage private rehabilitation of buildings and creation of arts districts where creative people and enterprises are encouraged to live, work, and collaborate
- Using public art programs to activate public locations in a way that engages all people in the creative process

Delivering a Better-Prepared Workforce



The art and design disciplines teach many of the skills that support innovation and high productivity and thus support high-wage jobs

Innovation matters here....

In 1971, a small coffee shop starts in Seattle's funky Pike Place Market with a new idea.



Innovation matters here...

“You can never recover out of a recession on the basis of the products that you had when the recession started. You can only pull out of the recession on the basis of new products.”

Intel founder Gordon Moore's advice to Andy Grove

Implications for Economic Development

Re-Valuing the Right Brain....

Will Go

- Logical
- Mathematical
- Linear
- Sequential
- Verbal
- Rational
- Serious



Can Stay

- Intuitive
- Artistic
- Nonlinear
- Simultaneous
- Visual
- Emotional
- Playful

See Daniel Pink, "The Whole Mind: Moving from the Information Age to the Conceptual Age"

What States Are Doing

- Maintaining the inclusion of arts in state curriculum requirements (and linking to STEM initiatives)
- Integrating arts and design into technical business programs in community colleges and universities
- Mapping career paths in creative enterprises and occupations
- Creating centers of excellence in higher education to recruit recognized faculty who can attract talented students and link the arts to technology to inspire innovation

Implications for the US

Global Position

- PAST: Cost competitive producers in a national economy dominated by production of stuff
- PRESENT: A high cost location in a global economy dominated by the creation of ideas

Building Expertise

- **State-sponsored Research Funds:** CA, GA, TX, NJ, NY, MI, AZ, OH, OK
- **Strategic, Focused Excellence:** Arizona Bioscience Roadmap, CA Institutes for Science and Innovation
- **Talent:** Lilly Endowment's \$100 M for "intellectual capital," Georgia Research Alliance's 100 Eminent Scholars, Kentucky "Bucks for Brains" \$120 M in 1998, 2000 and 2005
- **New Fields and Young Talent:** ASU's new master's in genomics and biotech law; new era medical schools; research funds marked for young investigators

Orchestrating Interaction

- **Networks:** UCSD CONNECT “Meet the Researcher”, BIOCOM, Bay Area Science and Innovation Consortium (BASIC)
- **ASU’s supercomputer** and Engineering school moves to main street Tempe
- **Innovation Districts:** Atlanta’s Technology Square, San Diego Torrey Pines, Research Triangle Park, PA’s Keystone Innovation Zone, Ohio Innovation Hubs
- **Partnerships:** Georgia Cancer Coalition, Joint Medical School University of AZ and ASU, CITRIS combines 4 CA universities—
Berkley, Davis, Merced, Santa Cruz, St. Louis Coalition for Plant and Life Sciences, more and more international partnerships
- **“Institutes of Collaboration”** SFAZ, ONAMI, QB3

Putting Diverse Knowledge Fields and Cultures Together

- AZ Biodesign Institute co-locates researchers from 3 fields; designed for interaction
- Incentives (R&D funds, new colleges) to encourage cross-disciplinary research and interaction
- Right brain and left brain— “MFA is the new MBA”
- Entrepreneurship across the university
- Entrepreneurial “boot camps”—New England Clean Energy Council’s Clean Energy Fellowship Program, UC at Davis
- Wanted: Charismatic, Collaborative scientists and researchers
- Silo, Solo is Passé

Ensuring Commercialization

- **University-industry partnerships** UC Discovery Grants
- **Industry and Peer Review** —force an outside look (e.g., venture capitalists, out-of-state reviewers)
- **Industry Cluster Focus** North Dakota State University's Center of Excellence in Surface Protection, Delaware's Center for Translational Cancer Research
- **Update Patent, IP, Tenure Policies**—to fit open-innovation business model, reward faculty entrepreneurs
- **Regulations and Procurement**—Y2K, green technologies, energy efficiencies
- **Focus on Problem-solving**—new energy sources, traffic congestion, chronic diseases

Connecting to Strategic Framework to Drive Innovation

- Building Expertise
- Organizing Interaction
- Linking diverse knowledge fields and cultures together
- Pushing the application and commercialization of research