

Economic Growth in Delaware: Costs, Benefits, and Realities

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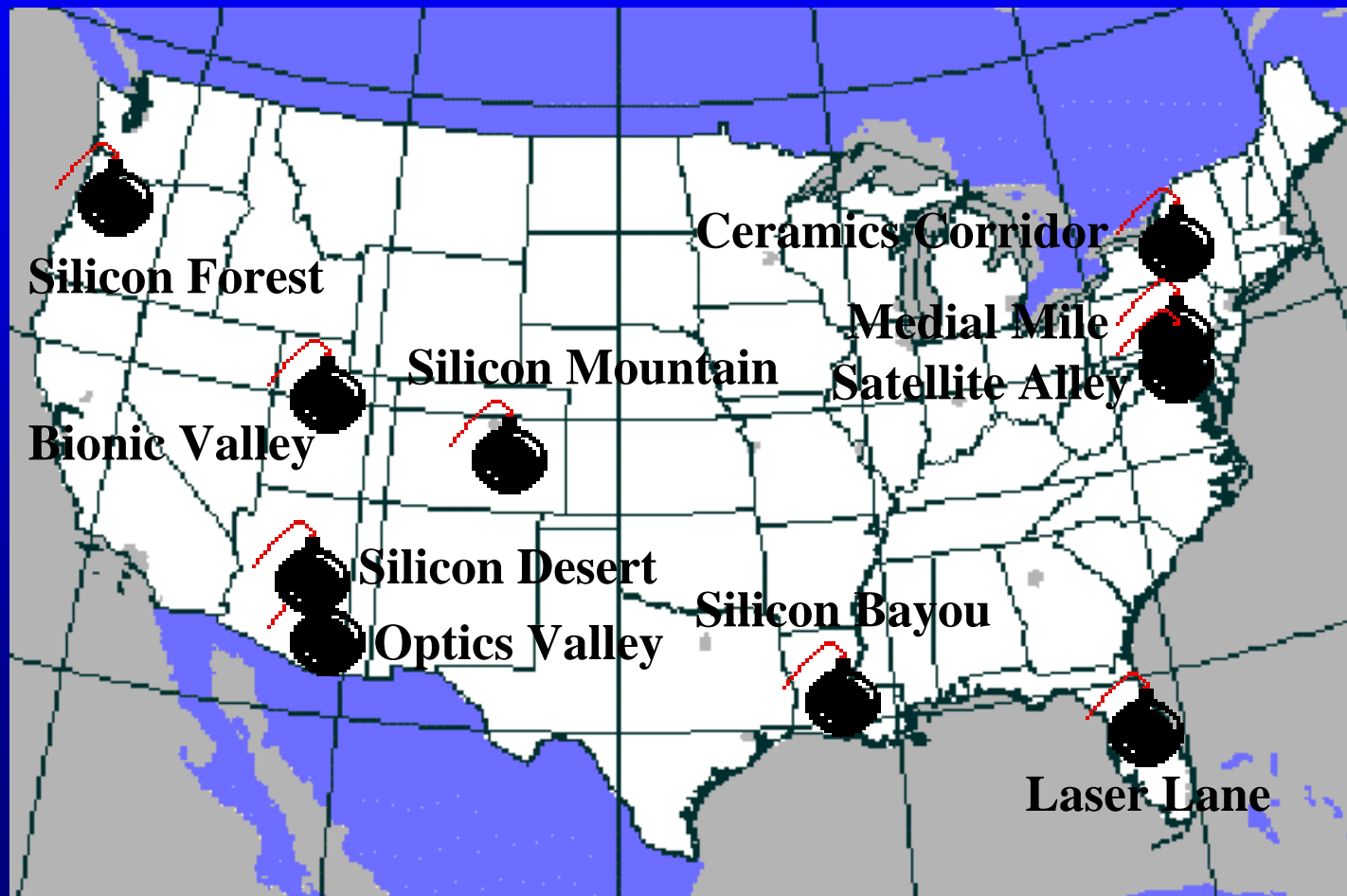
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Examples of Successful Regional Development



Examples of Failed Regional Development



Reproducing a “Silicon Valley” In Delaware Is Unlikely

- Silicon Valley guru, Frederick Terman, failed to repeat success in ventures with Princeton and Southern Methodist University
 - Unique interactions with Stanford and Berkeley led to success in Silicon Valley
 - Post-World War II defense spending in electronics
- Large market for resources and products existed along Route 128
- Consortium of microprocessors in Austin, TX

What Factors Caused Failure?

- Unprepared labor force
- Insufficient time for success
- Failure to recruit key firms/industries
- Inadequate infrastructure
- Inability to take the “second step”
- Cultural/institutional barriers to growth

What Can We Reasonably Expect In Delaware ?

- Sustained moderate economic growth is attainable.
- We can avoid the mistakes of failed regional development efforts.
- We can build on the foundations we have.

Foundations of Regional Economic Growth

- People
- Sites
- Infrastructure
- Cultural/Institutional
- Amenities
- Cumulative advantages

Research Findings: People

¥ A concentration of college-educated adults has a strong positive effect on growth in producer services (Porterfield, 1990).

¥ High school attainment level has a significant positive relationship with entrepreneurial activity (Bartik, 1989).

¥ A large proportion of new jobs are created by autonomous small and medium enterprises (Reynolds, 1994).

Foundations of Regional Economic Growth

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- Sites
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- Cumulative advantages

Research Findings:

Infrastructure

¥ Infrastructure investment increases the regional demand for private inputs and stimulates the multiplier effect within the economy (Fox, 1990).

¥ The greatest benefit of infrastructure is its ability to serve as a catalyst for development and increased productivity through improved efficiency (Garrison, 1994).

¥ Considerable debate exists regarding the exact magnitude of infrastructure investment (Aschauer, 1989; Munnell and Cook, 1990; Harmatuk, 1996).

Foundations of Regional Economic Growth

- People
- Sites
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- Cultural/Institutional
- Amenities
- Cumulative advantages

Research Findings:

Cultural/Institutional Environment

¥ Incentives have historically been provided through fiscal policy; however, "new wave" regional growth policies (support of innovation, industrial modernization, technological advancement, and technology transfer programs), have recently moved to the forefront (Bartik, 1991).

¥ Tax abatements and deferred tax payments have been found to be insignificant in stimulating economic growth (Walzer and Pong, 1995).

¥ Right-to-work laws reduce the cost of labor by 10% to 18% and the cost of capital by 9% to 19% (Garofalo and Malhotra, 1992).

Foundations of Regional Economic Growth

- People
- Sites
- Infrastructure
- Cultural/Institutional
- Amenities
- Cumulative advantages

Research Findings: Amenities

¥ Regional amenities are important to economic growth (Kohler, 1997).

¥ Firms migrate to regions where profits can be maximized; lower wages in areas with significant amenities attract new business (Clark and Cosgrove, 1991).

¥ In firm location decisions, avoidance of disamenities is more important than attraction to amenities (Gottlieb, 1995).

Foundations of Regional Economic Growth

- People
- Sites
- Infrastructure
- Cultural/Institutional
- Amenities
- Cumulative and Reinforcing Effects

Research Findings:

Cumulative and Reinforcing Effects

¥ Access to pools of specialized labor reduces training costs and minimizes the loss of productivity resulting from the mismatch between workers and firms (Kim, 1987).

¥ By following other firms, new companies can reduce or entirely eliminate the search costs involved with industrial location (Pascal and McCall, 1980).

¥ By locating in an established urban setting, firms can maximize information-intensive business contacts, which spawns product innovation (Davelaar and Nijkamp, 1989).

Foundations of Regional Economic Growth

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- Infrastructure
- Cultural/Institutional Environment
- Amenities
- Cumulative and Reinforcing Effects

Realities of Economic Growth Policy for Delaware

- Economic development resources are limited
 - Delaware does not have sufficient resources to promote economic development of all kinds in all places.
 - Delaware must be selective with regard to regional growth policies.
- Benefits and costs should be the basis for the selection of growth policies

Benefits of Economic Growth in Delaware

- Providing desirable job opportunities for Delawareans
- Expanding the tax base for goods and services
- Increasing private investment
- Ensuring Delaware's economic growth and reinforcing its economic base
- Expanding market opportunities and choices

Research Findings:

Benefits

¥ A dollar increase in median income produces a \$0.20 to \$0.40 increase in land values per acre (Ottensmann, 1977).

Benefits of Economic Growth in Delaware

- Providing desirable job opportunities for Delawareans
- Expanding the tax base to support increased public goods and services
- Increasing private property values
- Ensuring Delaware's future: growth is cumulative and reinforcing
- Expanding markets to support increased consumer choices

Potential Costs of Economic Growth in Delaware

- Congestion
- Crime
- Environmental
- Urban Sprawl
- Loss of Local
- Cross-border

Research Findings: Congestion

¥ Congestion cost the the British economy approximately 3% of GDP in 1987 (Banister, 1994).

¥ Congestion is increasing most in areas of rapid employment and/or income growth (National Transportation Statistics , 1997).

¥ Economic benefits of the transportation infrastructure can best be realized by using the existing stock more efficiently (Boarnet, 1997).

Potential Costs of Economic Growth in Delaware

- Congestion
- Crime
- Environmental
- Urban Sprawl
- Loss of Local
- Cross-border

Research Findings:

Crime

¥ Growth of population makes the apprehension of criminals more difficult and encourages illegal activity. Transients increase the incidence of property crime (Jarrell and Howsen, 1990).

¥ Higher per capita and aggregate incomes lead to higher total crime rates (Hemley and McPheters, 1975).

Potential Costs of Economic Growth in Delaware

- Congestion
- Crime
- Environmental
- Urban Sprawl
- Loss of Local
- Cross-border

Research Findings: Environmental Degradation

¥ Economic growth brings an initial stage of degradation followed by a period of environmental improvement (Arrow et al., 1995; Grossman and Krueger, 1995).

¥ When a particular standard of living is attained, constituents begin to focus on surrounding environmental amenities (Grossman and Krueger, 1995).

Potential Costs of Economic Growth in Delaware

- Congestion
- Crime
- Environmental
- Urban Sprawl
- Loss of Local
- Cross-border

Research Findings: Urban Sprawl

¥ Urban sprawl leads to conflicting land uses, pressures on agricultural and open space, higher cost of service provision, transportation congestion, and social disparities (Thomas, 1990).

¥ Estimates of the cost associated with urban sprawl range from as low as 3% higher than that of planned development (Peiser, 1984) to significantly higher. (Real Estate Research Corporation, 1974).

Potential Costs of Economic Growth in Delaware

- Congestion
- Crime
- Environmental
- Urban Sprawl
- Loss of Local
- Cross-border

Cross-border Effects

¥ Realities: Delaware's growth is fueled by out-of-state workers from Pennsylvania, Maryland and New Jersey.

¥ Benefit: Expanding income tax base without resident costs (e.g., schools)

¥ Costs: Must provide transportation infrastructure to accommodate those workers

Potential Costs of Economic Growth in Delaware

- Congestion
- Crime
- Environmental Degradation
- Urban Sprawl
- Loss of Local Identity
- Cross-border Effects

The Desirability of Growth Varies by Industry

- Benefits vary by industry
 - Wages and salaries
 - Tax base
- Costs vary by industry
 - Environmental damage
 - Congestion

Research Findings: Average Salary by Sector

<u>Sector</u>	<u>Salary</u>
FIRE	\$36,109
Trans., Comm., and Util	\$34,739
Construction	\$31,446
Services	\$26,006
Agriculture	\$19,657
Retail	\$14,992

The Desirability of Economic Growth Varies by Location

- Benefits vary by location

For example, per capita income in New Castle County is \$25,000 so a \$25,000 job raises income but not in New Castle

- Costs vary by location
 - Environmental
 - Congestion/
 - New Castle

Research Findings: Distribution of Benefits

¥ Distribution of benefits is wider than that of growth: stability in the distribution of benefits among communities, large gains for communities that grow most rapidly but benefits for communities that experience little or no growth directly (Danielson and Wolpert, 1991).

¥ During the 1980s, northern New Jersey gained 400,000 jobs but only 150,000 new residents. Most of the benefits were attained without many of the associated costs (Danielson and Wolpert, 1991).

What do we mean by “economic growth”?

- More jobs?
- More people
- More tax revenue
- More public
- Higher per capita

Research Findings: “Economic Growth”

¥ Gross output and employment are adequate for measuring aggregate growth. However, personal income is more relevant for determining the economic welfare and average material well being of individual constituents (Malizia, 1990).

Example of Growth Proposal Evaluation

Proposal: A firm in the Financial, Insurance, and Real Estate sector desires to locate in New Castle County

		Industrial Sector	County
		Financial, Insurance, Real Estate	New Castle
Benefits	Job Opportunities	++	+
	Public G&S		
	Property Values		
	Future	+	+
	Consumer Choice	+	+
Costs	Congestion	-	-
	Crime		
	Environment		
	Urban Sprawl	-	-
	Identity		

Example of Growth Proposal Evaluation

Proposal: A firm in the Manufacturing sector desires to locate in New Castle County

		Industrial Sector	County
		Manufacturing	New Castle
Benefits	Job Opportunities	+	+
	Public G&S	++	+
	Property Values	+	+
	Future	+	+
	Consumer Choice		
Costs	Congestion	-	-
	Crime		
	Environment	---	---
	Urban Sprawl	-	-
	Identity		

Example of Growth Proposal Evaluation

Proposal: A firm in the Manufacturing sector desires to locate in Kent County

		Industrial Sector	County
		Manufacturing	Kent
Benefits	Job Opportunities	+	+
	Public G&S	++	
	Property Values	+	+
	Future	+	
	Consumer Choice		
Costs	Congestion	-	
	Crime		
	Environment	---	-
	Urban Sprawl	-	
	Identity		-

What Should We Reasonably Expect In Delaware ?

- Delaware can attain sustained moderate economic growth in the future.
- Provided that we...
 - understand the costs and benefits associated with proposals
 - avoid the mistakes of failed regional development efforts, and
 - build on the foundations currently in place