

# **BOOSTING METROHARTFORD'S ECONOMIC PERFORMANCE IN THE NEW MILLENNIUM**

Recommendations to Enhance the Region's Competitive Position By 2010

## **OBJECTIVE**

The MetroHartford Millennium Project, in collaboration with the University of Connecticut's Center for Economic Analysis, has undertaken a long-term research initiative to continually track the Hartford region's economic progress over time. This research identifies similar high-performing metro regions and systematically compares them to MetroHartford, providing a careful, on-going assessment of the drivers of relative performance. In conjunction with this "benchmarking" effort, the Millennium Project's Economic Advisory Board has now prepared a series of specific policy recommendations that would help lay the foundations for MetroHartford's emergence as a truly effective regional, national, and global competitor.

## **SUMMARY OF FINDINGS**

The Economic Advisory Board has identified three spheres of "best practice" which appear to explain, at least in part, why the Hartford Metropolitan Area's economic performance has trailed many of its close competitors in recent years. Based on that analysis, the Advisory Board has developed specific short-term and generic longer-term policy recommendations, which, if implemented successfully, are most likely to lead to significant and lasting improvements in MetroHartford's economic base. In turn, significant progress in reforming MetroHartford's political structure, improving its physical infrastructure, and augmenting the quality of its human capital promises to significantly help the Region to achieve its goal – to become one of the nation's top-ten places to live and work.

In short, the Advisory Board's policy recommendations are:

### Reform Political Structure to Strengthen the Civic Infrastructure

- Near-Term: Achieve Charter revision in Hartford to provide stronger civic leadership.
- Near-Term: Establish a Regional/Interstate airport authority.
- Long-Term: Persuade the State to pass legislation that permits creation of high-impact Regional organizations and political frameworks with real authority and significant resources.

### Improve Physical Infrastructure to Support Highly Competitive Transportation and Communication

- Near-Term: Develop prototype "wired communities" within Region (e.g., Blacksburg, VA and Austin, TX).
- Near-Term: Build Bradley Airport connector to north-south Amtrak rail corridor.
- Long-Term: Achieve full electronic and transportation "connectivity" within the Region (e.g., Internet, educational institutions) and to critical transit nodes (e.g., New Haven, Springfield).

### Augment Human Capital to Build a Highly Qualified Workforce

- Near-Term: Destigmatize and energize vocational education.
- Near-Term: Accelerate progress toward Regional demand-driven education and training, in part via high-visibility programs (e.g., financial services and health insurance) that retain and attract critical employers.
- Long-Term: Expand cadres of "Regional stakeholders" by boosting homeownership, young professional recruitment/retention, key industry clusters, and, demand-driven training.

## **BACKGROUND**

These recommendations are based on two detailed studies that the Millennium Project's Economic Advisory Board has conducted over the past year. The first developed the MetroHartford Benchmarking Index,<sup>1</sup> which assessed the Hartford Region's economic standing relative to 56 comparable metros in the Northeast and across the U.S. The Benchmarking Study utilized a multitude of measures that captured all aspects of Regional social, physical, political, and economic development. That Study identified three principal factors that accounted for MetroHartford's relatively low overall

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<sup>1</sup> *First Annual MetroHartford BenchMarking Report* (1999)

# BOOSTING METROHARTFORD'S ECONOMIC PERFORMANCE IN THE NEW MILLENNIUM

## Recommendations to Enhance the Region's Competitive Position By 2010

ranking (39<sup>th</sup> of 56) at mid-decade – labeled *economic vitality* (54<sup>th</sup>), *socio-economic productivity* (39<sup>th</sup>), and *quality of life* (4<sup>th</sup>).

The good news is that MetroHartford ranks very high in “quality of life,” because the key drivers of this factor are among the most difficult to impact through policy and improvements, if any, tend to occur only over long periods of time. On the other hand, gains in *economic vitality* and *socio-economic productivity* appear to be more amenable to policy initiatives and other critical investments that positively impact their key drivers.

### THE POLICY ANALYSIS

In an attempt to find prescriptions for meaningful progress, the Millennium Project's Economic Advisory Board undertook a second study – a comprehensive comparison of metropolitan Hartford to seven of its closest competitors. Five of these metros – *Columbus, OH; Harrisburg, PA; Des Moines, IA; Austin, TX; and Raleigh-Durham, NC* – were high performers in the Benchmarking Study. Two others -- *Providence, RI and Albany, NY* -- were low performers, like Hartford, as well as close neighbors. All are comparable to Hartford: their core cities are state capitals, their total metro population is in the same “mid-sized” range, and each is located on or has access to a major river. Each must also compete with much larger economic centers (e.g., Boston and New York for Hartford, Albany, and Providence) within their own regions.

The purpose of this Comparative Metro Policy Analysis was to identify, if possible, what specific characteristics and practices might account for superior performance. The Policy Analysis encompasses a large number of variables which measure each metro's physical infrastructure (e.g., airports, convention facilities), political structure (e.g., taxing jurisdictions, relative tax burdens), human capital (e.g., education, high tech concentration), and social capital (e.g., crime rates, intra-metro home ownership rates).

Like the Benchmarking Study before it, this work was carried out at the metropolitan area level. Consequently, the “best practices” and other insights, which appear to account for the superior performance of other metros, might need to be refined or adjusted to fit unique circumstances in MetroHartford, its constituent towns, and neighborhoods. Indeed, one of ancillary findings of this work appears to confirm a commonly accepted axiom: that the health of a metropolitan area is inexorably intertwined with the health of its central city. As a result, any set of initiatives or policies designed to improve the City of Hartford's competitiveness must simultaneously boost the socio-economic vitality of MetroHartford– as precedent to that overall improvement, not as an eventual consequence.

Attached are several tables that present the details of this work. These are:

- Table 1: Comparative Rankings of Eight Metro's Policy-Related Performance
- Table 2: Variables Which Measure Eight Metro's Physical Infrastructure
- Table 3: Variables Which Measure Eight Metro's Political Structure
- Table 4: Variables Which Measure Eight Metro's Human Capital

As summarized in Table 1, Hartford ranks last or next to last on all aspects of policy-related performance. Looking at each of the 35 individual variables, Hartford ranks eighth (last) on 15 of them, in the bottom-three ranks on 24 of them, and in the top-three ranks on only 7 measures. In all cases, composite rankings are on an equally-weighted basis. Most ranks are based on numerical data for the individual variable involved, but a few are subjective based on qualitative data. While a comparative ranking approach doesn't statistically prove a connection between the results of the Benchmarking Study and the Policy Analysis, it is noteworthy that the ranks obtained from each are closely correlated. In particular, as noted at the bottom of Table 1, the ranks on Economic Vitality are identical, except that the top-two metros (Austin and Raleigh) are interchanged.

The implication of these results is clear – there is strong correlation between each Metro's performance on the selected policy-related variables and relative economic performance. This implies, equally strongly, that meaningful progress

# **BOOSTING METROHARTFORD'S ECONOMIC PERFORMANCE IN THE NEW MILLENNIUM**

## **Recommendations to Enhance the Region's Competitive Position By 2010**

toward boosting MetroHartford's performance is critically linked to achieving improvements on at least three key policy-related fronts: *physical infrastructure, political structure, and human capital*. The work of the Millennium Project's Economic Advisory Board emphasizes that there are important gains that can be realized on each front, some in relatively short order.

### **DETAILED FINDINGS**

#### **Reform MetroHartford's Political Structure**

The ability of any region to compete effectively flows significantly from the capacity of its civic government and non-governmental organizations to respond effectively to both internal needs and competitive challenges. Comparative analysis shows that the MetroHartford region is strikingly deficient in this area of best practice. The City of Hartford has a weak mayor system with at-large elections that has led to policy paralysis; successful comparable metro regions are uniformly characterized by strong mayor systems in the central cities. The latter also have multiple regional authorities with focused functional responsibilities and appropriate taxing authority. In particular, these authorities effectively regionalize those functions that benefit most from significant economies of scale: In North Carolina, counties have standing authority to merge functions without state review; all five high performing metros have administrative and fiscal authorities that transcend municipal boundaries. Successful metro areas' school districts have diverse sources of income to finance education (e.g., Des Moines and Columbus have multiple taxing jurisdictions). Moreover, they develop a mechanism to equalize wealth across the school districts of a region (e.g., Raleigh organizes education at the county level and Austin encourages school districts to merge). The long-term objective for MetroHartford should be to capture efficiencies in governance and public service provision enjoyed by their more successful direct competitors. MetroHartford must develop coordinated state and local policies that both permit and facilitate creation of Regional frameworks with real authority and significant resources.

This points to two immediate policy objectives:

- Strong support for appropriate Charter Revision in Hartford, moving to a strong mayor system with at least a portion of the City Council elected from districts and for completing the initiative to "re-invent" city government.
- Strengthen the governance and management of what is the single most important infrastructure asset in the region: Bradley International Airport. And explore how to engage Western Massachusetts in development of what is pre-eminently a *regional* asset.

#### **Improve MetroHartford's Physical Infrastructure**

Economic development and long-term competitiveness are critically linked to the quality and connectivity of the regional transportation and communication systems, including road, rail, air, and telecommunications. These systems are the bedrock for business activity. The MetroHartford region has failed to develop the level of connectivity that would fully leverage its assets and make it far more congenial for existing businesses and attractive to new ones. The long-term objective should be the rapid development of a comprehensive, integrated plan for transportation and communication framework for the region.

This points to two immediate policy objectives:

## **BOOSTING METROHARTFORD'S ECONOMIC PERFORMANCE IN THE NEW MILLENNIUM**

### Recommendations to Enhance the Region's Competitive Position By 2010

- Improving connections to Bradley airport for both passengers and, significantly, freight traffic. Bradley is one of the largest handlers of freight among regional airports; the relatively short rail connector needed to give it rail service would dramatically strengthen its competitive position.
- Rapid development of a high-speed telecommunications backbone for the (region) state, centered on its educational institutions in recognition of the centrality of such capabilities both to provision of appropriate educational programs and to linking all citizens to the New Economy.

### **Augment MetroHartford's Human Capital**

Creating, retaining, and attracting a strong work force for any region is a major challenge. Not only does the public sector need to provide the kind of education that is fundamental to developing a work force attractive to enterprise, but policies must be articulated that will give people a clear stake in their community, their schools, their jobs. The challenge is to make everyone—individuals, families, businesses—stakeholders in the region. The City of Hartford suffers from a startlingly high rate of adult illiteracy (41% at Level 1), extraordinarily low home ownership rates, and high levels of mobility. MetroHartford has an uncommonly uneven level of educational attainment and at the same time lacks the kind of focused educational avenues that facilitate upward mobility. The long-term objective is therefore to articulate policies and create frameworks that will dramatically increase the level of “stakeholding” in the region and develop educational programs that facilitate entry to steady, productive employment.

This points to two immediate policy objectives:

- Destigmatize and energize vocational education through focused marketing and investments in existing and expanded structures. Such programs would enhance alternative pathways to nondegreed, productive careers and provide backfill for our aging (manufacturing) workforce.
- Develop highly visible “Institutes” or other appropriate training programs for targets of opportunity: e.g., specialized programs for training personnel for health insurance and financial services.

# **BOOSTING METROHARTFORD'S ECONOMIC PERFORMANCE IN THE NEW MILLENNIUM**

Recommendations to Enhance the Region's Competitive Position By 2010

## **THE MILLENNIUM PROJECT'S ROLE**

The MetroHartford Millennium Project is the first comprehensive economic development plan ever to create core strategies and implement specific action steps for the entire Region. More importantly, it was developed and is supported by dozens of corporations and municipal, civic, non-profit, and state agencies. It has helped create the collaborations and collective will to take action and make change happen. The Connecticut Capitol Region Growth Council, which created Millennium, is dedicated to building MetroHartford's economy through job creation and capital formation in the 29 area towns.

It's Economic Advisory Board created the analyses and insights that are the basis for the recommendations herein. The Advisory Board's continuing members are:

- Jeffrey Blodgett, Connecticut Economic Resource Center;
- Fred Carstensen, University of Connecticut/Connecticut Center for Economic Analysis;
- William Cibes, Connecticut State University System;
- James Moor, The Hartford Financial Services Group; and
- John Shemo, Connecticut Capitol Region Growth Council.

Special acknowledgement is due the University of Connecticut's Murat Arik, Thomas Cooke, Connecticut Metropolitan Studies Institute; Bill Lott, Center for Economic Analysis (CCEA); and, particularly Stan McMillen, CCEA's Project Manager for both studies. Under Fred Carstensen's leadership, their collective research expertise and unselfish collaboration have provided technically sound bases for this work.

## **CALL TO ACTION**

Well-coordinated efforts will be critical to reaping these gains. The credit for them will go, in many cases, to important initiatives that are already underway, championed by individuals and groups who have gone before the Millennium Project or are synchronized with its aims. The policy recommendations herein serve either to underscore what's already been accomplished or to leverage that progress for further gain. Progress will not come easily; nor will the Hartford metro's close competitors stand idle. But it is time for decisive action, bold steps, and long overdue investments. MetroHartford must find a way to break down the parochial and fragmented structures and policies that have long constrained its development as a Region. MetroHartford's future depends on it.

# BOOSTING METROHARTFORD'S ECONOMIC PERFORMANCE IN THE NEW MILLENNIUM

Recommendations to Enhance the Region's Competitive Position By 2010

Table 1: Comparing Policy-Related Performance – Ranking MetroHartford and its Competitors

POLICY SPHERE	METROPOLITAN STATISTICAL AREA							
	HARTFORD	PROVIDENCE	ALBANY	COLUMBUS	HARRISBURG	DES MOINES	AUSTIN	RALEIGH
<b>PHYSICAL</b>								
<b>INFRASTRUCTURE:</b>								
Hotel Rooms	7	8	6	5	3	1	4	2
Hotel Revenue	7	8	6	5	2	1	3	4
Enplanements	4	5	6	2	8	7	3	1
Airport Connection	8	5	7	2	6	4	1	3
Recreation	2	1	3	5	8	7	4	6
Arts	1	5	4	2	8	7	6	3
Convention Center	7	6	5	2	8	4	3	1
Housing Starts	8	5	7	4	6	3	2	1
Interstate Highway	6	8	2	5	1	4	7	3
Energy Costs	7	8	6	3	5	2	1	4
Cost of Doing Business	8	6	7	4	5	1	2	3
Office Rent	5	3	1	7	2	4	8	6
Transportation System	3	4	5	2	8	7	6	1
<b>Sum</b>	<b>73</b>	<b>72</b>	<b>65</b>	<b>48</b>	<b>68</b>	<b>52</b>	<b>50</b>	<b>38</b>
<b>Rank</b>	<b>8</b>	<b>7</b>	<b>5</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>1</b>
<b>POLITICAL</b>								
<b>INFRASTRUCTURE:</b>								
Home Ownership Gap	8	5	6	4	7	1	2	3
Voter Turnout	4	2	5	3	7	1	8	6
Government Structure	8	6	7	5	2	3	4	1
Political Complexity	8	7	6	5	3	1	4	2
School Taxing Authority	6	8	2	3	4	5	1	7
Property Tax Burden	8	7	6	5	4	3	2	1
State & Local Tax Burden	8	7	6	5	4	3	2	1
Corporate Income Tax	6	3	8	1	7	2	4	5
Air Quality	8	7	6	5	4	3	2	1
<b>Sum</b>	<b>64</b>	<b>52</b>	<b>52</b>	<b>36</b>	<b>42</b>	<b>23</b>	<b>29</b>	<b>27</b>
<b>Rank</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>4</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>2</b>
<b>HUMAN CAPITAL:</b>								
High-Tech Growth	8	6	7	3	1	4	2	5
Adult Literacy	8	6	5	4	7	1	2	3
High School Diploma	6	8	4	5	7	1	2	3
College Degree	3	7	4	5	8	6	2	1
Population Growth	7	6	8	4	5	3	1	2
Unemployment Rate	6	8	7	4	5	2	3	1
Output per Capital	4	8	7	3	5	2	6	1
% Economically Active Pop.	2	6	5	4	7	3	8	1
Patents Per Capital	6	5	7	3	4	8	2	1
% Dependent Population	7	6	8	3	5	4	2	1
Unit Labor Costs	8	2	7	4	6	1	3	5
High-Tech Concentration	3	6	5	4	8	7	2	1
Economic Diversity	8	4	6	2	3	7	5	1
<b>Sum</b>	<b>76</b>	<b>78</b>	<b>80</b>	<b>48</b>	<b>71</b>	<b>49</b>	<b>40</b>	<b>26</b>
<b>Rank</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>2</b>	<b>1</b>
<b>Overall Sum</b>	<b>213</b>	<b>202</b>	<b>197</b>	<b>132</b>	<b>181</b>	<b>123</b>	<b>119</b>	<b>91</b>
<b>Rank</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>Socio-Economic Productivity Score*</b>	<b>38</b>	<b>57</b>	<b>11</b>	<b>65</b>	<b>84</b>	<b>61</b>	<b>75</b>	<b>74</b>
<b>Rank</b>	<b>7</b>	<b>6</b>	<b>8</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>3</b>
<b>Economic Vitality Score*</b>	<b>3</b>	<b>7</b>	<b>23</b>	<b>48</b>	<b>40</b>	<b>83</b>	<b>99</b>	<b>92</b>
<b>Rank</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>2</b>

\* From The MetroHartford Benchmarking Project

# BOOSTING METROHARTFORD'S ECONOMIC PERFORMANCE IN THE NEW MILLENNIUM

Recommendations to Enhance the Region's Competitive Position By 2010

**Table 2: Physical Infrastructure**

Variables									Sources
Hotels: # of Rooms per 1,000 pop.	Providence 3.6	Hartford 7.4	Albany 8.1	Columbus 9.5	Austin 9.9	Harrisburg 10.9	Raleigh 11.9	Des Moines 16.3	Census Survey(CS)-Service Ind., MSA level
Hotels: Revenue PC	Providence 65.1	Hartford 108.6	Albany 153.2	Columbus 155.8	Raleigh 177.5	Austin 182.0	Harrisburg 233.1	Des Moines 235.4	CS, Service Ind., MSA level
Airports: Enplanement	Harrisburg 715,924 Small Hub	Des Moines 849,603 Small Hub	Albany 1,140,518 Small Hub	Providence 2,556,183 Small Hub	Hartford 3,148,196 Medium Hub	Austin 3,305,073 Medium Hub	Columbus 3,366,430 Medium Hub	Raleigh 4,394,220 Large Hub	Places Rated Almanac & FAA-MSA
Airport: Cost to Commute	Hartford: 14 Miles/No local bus	Albany: 8 Miles/No Local Bus	Harrisburg: 8 miles/No local bus	Providence: 6 Miles/ No local bus	Des Moines: 3 Miles/ no local bus	Raleigh: 9 Miles/ Local Bus	Columbus: 7 Miles/ Local Bus	Austin: 4 Miles/ Local Bus	Airport Homepages
Arts Index	Harrisburg 46.18	Des Moines 60.34	Austin 72.24	Providence 77.63	Albany 79.61	Raleigh 86.12	Columbus 92.64	Hartford 93.77	Places Rated Almanac- MSA Level
Recreation Index	Harrisburg 61.47	Des Moines 67.42	Austin 68.83	Raleigh 72.80	Hartford 75.07	Albany 77.62	Providence 79.32	Columbus 81.86	Places Rated Almanac, MSA level
Convention Center	Harrisburg: No convention center-but a variety of conference centers	Hartford: Civic Center: 9 meeting room. Capacity from 30 to 4,400	Providence: Convention Center-35 meeting rooms-in 1998, 39 conference and meetings	Albany: In 1996, 195 groups were hosted; 106,779 attendee; \$68 million econ. impact	Des Moines: In 1998, about 500,000 convention center visitors. Skywalk connection	Austin: In 1996, 33 and 1992 and 1997, 185 conventions. \$69 million impact on economy	Columbus: In 1998, 1.5 million attendees, \$220 million economic impact	Raleigh: In 1998, 503,137 attendee, 8,675 meetings & \$ 259 million economic impact	Information is taken from the webpages of the Conventions and Visitors Bureau in each core city.
Housing Starts PC-Per 1,000 Pop.	Hartford 3.0	Albany 3.5	Harrisburg 4.5	Providence 6.5	Columbus 7.0	Des Moines 8.1	Austin 15.3	Raleigh 18.2	CenStat (Census Bureau)-MSA Level
Number of Interstate Highways	Providence 1	Austin 1	Hartford 2	Columbus 2	Des Moines 2	Raleigh 2	Albany 3	Harrisburg 3	Places Rated Alm. (PRA)-MSA
Energy Index	Providence 146.4	Hartford 144.7	Albany 126.3	Harrisburg 110.3	Raleigh 93.9	Columbus 90.2	Des Moines 86.1	Austin 83.8	RFA-Cost of Doing Business
Overall Cost of Doing Business Ind.	Hartford 114.2	Albany 103.8	Providence 100.3	Harrisburg 98.4	Columbus 97.3	Raleigh 96.5	Austin 91.5	Des Moines 83.9	RFA-Cost of Doing Business
Office Rent Index	Austin 99.4	Columbus 97.6	Raleigh 90.5	Hartford 88.4	Des Moines 87.5	Providence 85.1	Harrisburg 85.0	Albany 82.6	RFA
Transportation Index: Connectivity, commute & Centrality	Harrisburg 77.62	Des Moines 78.18	Austin 78.75	Albany 82.71	Providence 83.0	Hartford 87.81	Columbus 91.21	Raleigh 92.06	PRA MSA. Connectivity: highway, air and rail service.

Low → High

Note: If passengers leaving an airport are 1% or more of all U.S. airline passengers in a year, that airport is a large hub; between 0.25% and 0.99% medium; between 0.05% and 0.24% small hub; and less than 0.05% non-hub.

# BOOSTING METROHARTFORD'S ECONOMIC PERFORMANCE IN THE NEW MILLENNIUM

Recommendations to Enhance the Region's Competitive Position By 2010

**Table 3: Political Infrastructure**

Variables									Sources
Type of Government	Hartford: No County Government-Weak Mayor-Council Manager Form of Government	Providence: No County Government-Strong Mayor	Albany: Weak County Government-Strong Mayor	Columbus: County Government	Harrisburg: County Government-County Level Consolidation efforts	Des Moines: County Government	Austin: County Government	Raleigh: County Government-County Level Consolidation Efforts-Durham County	Information is taken from the various web pages related to these MSAs
Number of governments in each MSA	Hartford:4 Cities; 55 Towns in 6 Counties	Providence: 9 Cities; 32 Towns	Albany: 6 Counties	Columbus: 6 Counties	Harrisburg: 4 Counties	Des Moines: 3 Counties	Austin: 5 Counties	Raleigh: 4 Counties	Places Rated Alamanac
School District Taxing Authority	Hartford: No	Providence: No	Albany: Yes	Columbus: Yes	Harrisburg: Yes	Des Moines: Yes	Austin: Yes	Raleigh: No	Information is from various web pages related to the school districts & Census Bureau
Home Ownership Rate (City/Metro Gap)	Hartford Metro: 65% City: 23.6% Gap: 41.4%	Harrisburg Metro:69% City: 42.4% Gap: 26.6%	Albany Metro: 64% City: 38.3% Gap: 25.7%	Providence Metro: 59% City: 36.2% Gap: 22.8%	Columbus Metro: 60% City: 46.6% Gap: 13.4%	Raleigh Metro: 59% City: 46.9% Gap: 12.1%	Austin Metro: 50% City: 40.6% Gap: 9.4%	Des Moines Metro: 67% City: 62% Gap: 5%	1998 County and City Extra & Census Bureau
Voter Turnout (State Level)	Austin 26.1%	Harrisburg 32.4%	Raleigh 35.4%	Albany 36.7%	Hartford 39.1%	Columbus 40.5%	Providence 40.8%	Des Moines 43.9%	Presidential Elections-State Level
Property Tax Burden PC-as a % of Total Taxes	Hartford 0.558	Albany 0.518	Providence 0.413	Des Moines 0.337	Austin 0.325	Harrisburg 0.277	Columbus 0.271	Raleigh 0.184	Tax Foundation of Hawaii, State Level
State and Local Tax Index	Columbus 110.5	Providence 109.7	Hartford 107.6	Albany 106.8	Des Moines 102.4	Raleigh 93.4	Harrisburg 91.1	Austin 90.7	RFA-Cost of Doing Business by Markey and Burt
Corporate Income Tax (CIT) Burden	Albany 8.7	Harrisburg 8.1	Hartford 7.8	Raleigh 7.7	Austin 7.1	Providence 5.4	Des Moines 4.7	Columbus 4.5	RFA-State Level
Air Quality Index-(Related to Regulations)	Albany 24.00	Harrisburg 32.00	Des Moines 32.50	Hartford 33.00	Austin 37.00	Providence 38.00	Columbus 42.25	Raleigh 44.50	EPA, Pollutant Std. Ind., County

Low → High



# BOOSTING METROHARTFORD'S ECONOMIC PERFORMANCE IN THE NEW MILLENNIUM

Recommendations to Enhance the Region's Competitive Position By 2010

**Table 4: Human Capital**

Variables									Sources
High-Tech Economy:Relative Growth Rate	Hartford 0.53197	Albany 0.811755	Providence 0.86894	Raleigh 0.98551	Des Moines 0.98583	Columbus 1.01782	Austin 1.92103	Harrisburg 2.58175	Milken Institute MSA
Level 1 Adult Literacy (Age 16+)	Hartford 41%	Harrisburg 36%	Providence 30%	Albany 21%	Columbus 20%	Raleigh 20%	Austin 17%	Des Moines 14%	National Institute for Literacy
% with High School Diploma	Providence 71.0	Harrisburg 76.9	Hartford 79.1	Columbus 79.8	Albany 79.8	Raleigh 80.0	Austin 81.2	Des Moines 85.4	Census Bureau- MSA level
% with College Degree	Harrisburg 18.0	Providence 20.4	Des Moines 22.6	Columbus 23.3	Albany 23.6	Hartford 26.5	Austin 30.7	Raleigh 31.7	Census Bureau- MSA
Population Growth Rate	Albany 1.6%	Hartford 2.2%	Providence 4.8%	Harrisburg 7.0%	Columbus 14.5%	Des Moines 16.1%	Raleigh 38.9%	Austin 47.7%	Census Bureau- 1990-2000MSA
Unemployment Rate	Providence 4.9	Albany 3.64	Hartford 3.46	Harrisburg 3.02	Columbus 2.67	Austin 2.63	Des Moines 2.12	Raleigh 1.73	RFA, MSA
Economic Output per cap.	Providence \$53,915.2	Albany \$53,933.9	Austin \$57,643.3	Harrisburg \$65,591.5	Hartford \$68,034.0	Columbus \$70,519.4	Des Moines \$75,225.6	Raleigh \$80,950.5	County & City Extra, MSA
Economically Active Population	Austin 77.6	Harrisburg 78.4	Providence 78.4	Albany 79.1	Columbus 79.3	Des Moines 79.4	Hartford 79.8	Raleigh 80.0	RFA, MSA
Patents Rate- (# of Patents/MSA Pop.)*1000	Des Moines 0.03	Albany 0.54	Hartford 0.86	Providence 0.86	Harrisburg 0.86	Columbus 0.88	Austin 1.30	Raleigh 9.44	RFA &USPTO,1998 MSA
Dependent Population Ratio	Albany 35.3%	Hartford 34.4%	Providence 34.4%	Harrisburg 34.3%	Des Moines 32.1%	Columbus 31.0%	Austin 30.1%	Raleigh 30.0%	RFA Data Buffet, MSA
Unit Labor Cost Index	Hartford 112.2	Albany 101.4	Harrisburg 98.9	Raleigh 98.5	Columbus 96.8	Austin 92.2	Providence 90.6	Des Moines 80.0	RFA, Cost of Doing Business
High-Tech Concentration (1 is low; 5 is high)	Harrisburg 2	Des Moines 2	Providence 3	Albany 3	Columbus 3	Hartford 4	Austin 5	Raleigh 5	The Business Monitor, Standard and Poor's DRI, MSA
Economic Diversity Index (1 is low; 5 is high)	Hartford 2	Des Moines 2	Albany 3	Austin 3	Providence 4	Harrisburg 4	Columbus 4	Raleigh 4	The Business Monitor, Standard and Poor's DRI, MSA

Low  $\longrightarrow$  High