MARKET FEASIBILITY STUDY FOR DEVELOPMENT OF THE CITY'S PENNY ROAD PARK DEVELOPMENT

Prepared for The City of Old Town Maine

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PolicyOne RESEARCH, INC.

camoin associates ECONOMIC DEVELOPMENT

Executive Summary

- The regional economy is not strong enough alone to fill a park and there are many single site options and generic park space/location options
- Strong engagement/partnership with UMaine will allow you to stand out from competition
- UMaine performs fairly well on R&D indictors and science and tech as a public university; but key outputs for generating demand for space such as licenses and spin-offs are still early and pace is gradual
- Target Tech is doing well, but again, volume of graduate company demand for employees and space is small and gradual
- UMaine targeted tech sectors off a good opportunity and mesh well with regional industry strengths
- This combined with energy alternatives will further differentiate you from other parks
- A park will require - Focus, focus, focus over the long-term; a strong relationship/commitment from UMaine to market the site to companies they interact with; focused regional marketing beyond the City, and even state acknowledgement and support
- Need to be in it for the long-term (20Years)

Market Potential

- Based on trends and performance of:
  - Maine's Technology Related Sectors
  - Bangor Region & Old Town Economy
  - UMaine Strengths in R&D, commercialization, and business relationships

Performance of Maine's Targeted Technology Sectors

- Between 2002 and 2010 employment in tech sectors decreased 11.5%. This compared to an increase of 4.7% in total employment in Maine. Nationally, employment in these technology sectors decreased 5.4% and total employment increased 8.6%.

- However several sectors/clusters faired well:
  - Biosciences
  - Energy & environment
  - Energy and environmental/technical services
  - Information technology

Performance of Maine's Targeted Technology Sectors

Employment Trends - Change			
Maine's Targeted Technology Cluster Summary	**%chg 2002-010**	**%chg 2006-2010**	**%chg 2009-2010**
Biotechnology	35.9%	15.6%	3.1%
Composites & Advanced Materials	-18.0%	-2.4%	3.7%
Engineering & Scientific/Technical Services	23.5%	10.8%	4.2%
Environmental & Energy	3.4%	13.8%	0.7%
Forest Products & Agriculture	-20.1%	-11.5%	-2.1%
Information technology	2.3%	3.8%	2.6%
Marine Technology & Aquaculture	-45.2%	7.1%	0.0%
Precision Manufacturing	-15.9%	-5.4%	-2.0%
Total Maine Tech Sectors	-11.5%	-5.0%	-0.5%
Maine Tech Sectors Excluding Forest & Agriculture	0.1%	3.4%	1.3%
Maine Total All Sectors	4.7%	1.1%	1.6%
Total U.S. Tech Sectors	-5.4%	-3.0%	0.7%
U.S. Tech Sectors Excluding Forest & Agriculture	-0.3%	-0.8%	1.7%
U.S. Total All Sectors	8.6%	1.7%	2.5%

Source: Compiled by PolicyOne Research from EMSI Complete Employment - 1st Quarter 2010

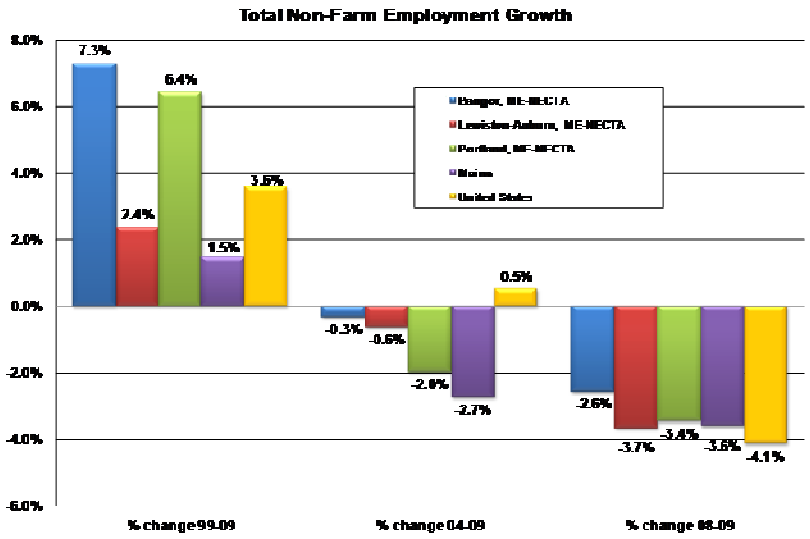
Bangor Region Performance Summary

- On several indicators the Bangor region lags that of Portland Region and U.S.
  - Population
  - Education attainment (bachelor's or higher)
  - Personal income growth
  - Gross metro product
  - Patents
  - Venture capital

Bangor Region Performance Summary

- However, there is also good news:
  - Total employment and private sector employment growth from 1999-09 in the Bangor region outpaced the Portland region, Maine, and the U.S.
  - More recently, the Bangor Region has dropped in employment less than Portland region, Maine, and the U.S.
  - Old Town draws labor from a large-geographic region
  - Several key industries are experiencing growth and have a strong, competitive concentration in the region

Bangor Region Performance



Regional Industry Strengths

Based on Current Employment Size:

- Trade/Transportation & Utilities Sector
- Transportation & Logistics Cluster
- Education & Health Services Sector
- *Biomedical/Life Science Cluster
- *Forest & Wood Products Cluster
- *Energy Cluster
- Business & Financial Service Cluster

* = UMaine Strength

Regional Industry Strengths

Based on Employment Growth Since 2002:

- *Agribusiness/Food Production Cluster
- *Manufacturing sector (in past few years)
- Education & health Services Sector
- Professional & Business Services Sector
- Trade, Transportation, & Utilities Sector
- *Biomedical/Life Science Cluster
- *Fabricated Metals Cluster
- *Defense & Security Cluster

* = UMaine Strength

Regional Industry Strengths

Based on Employment Concentration/Specialization:

- *Forest & Wood Products Cluster
- *Biomedical/Life Science Cluster
- *Energy Cluster
- *Transportation & Logistics Cluster
- *Surveying and Mapping Sector

* = UMaine Strength

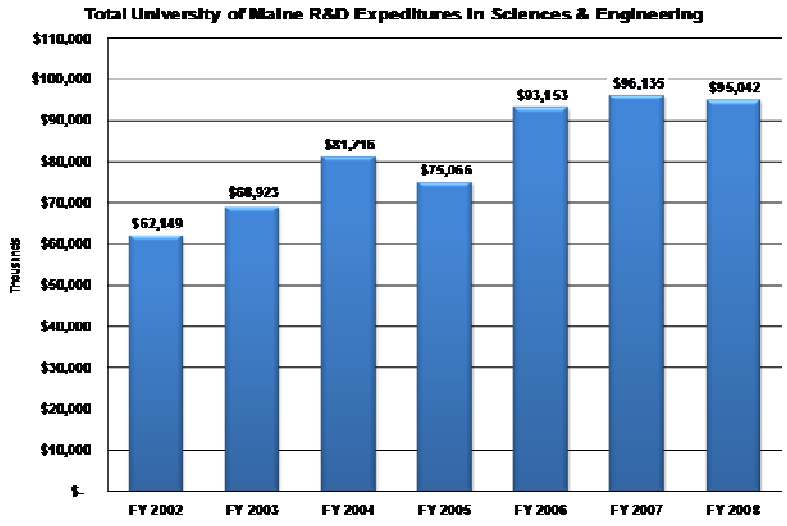
Bangor Region Performance Bottom-line

- Sold base but not "heated growth"
- Long-term demand (jobs, companies, space) will be there but can be characterized as steady and gradual
- Focus needs to be on differentiation from other sites through concentration on industry strengths that are at the cross-section of regional strengths and UMaine R&D commercialization strengths
- Plus, a few other key industry areas offer promise:
  - Data centers
  - Niche manufacturing/manufacturing that fits with other strengths
  - Manufacturing, information, and tech services related to medical and health industries services

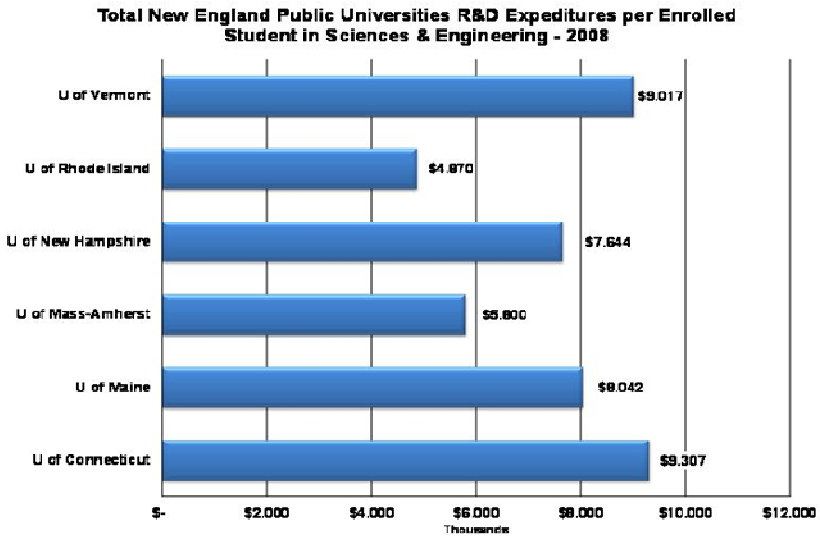
UMaine Performance Summary

- From FY2002 to FY2008 total R&D expenditures in the sciences and engineering fields at the University have increased from $62m in FY 2002 to $95m or 52.9%.
- In terms of R&D in Science &Engineering fields, the University ranked:
  - 135th out of 679 colleges and universities at in total research and development in 2008
  - 154th out of 673 colleges and universities in federally funded research and development in 2008
  - 154th out of 479 colleges and universities in industry financed research and development 008
  - 169th out of 1,226 colleges and universities in regards to the amount of federal obligations at colleges and universities in 2006

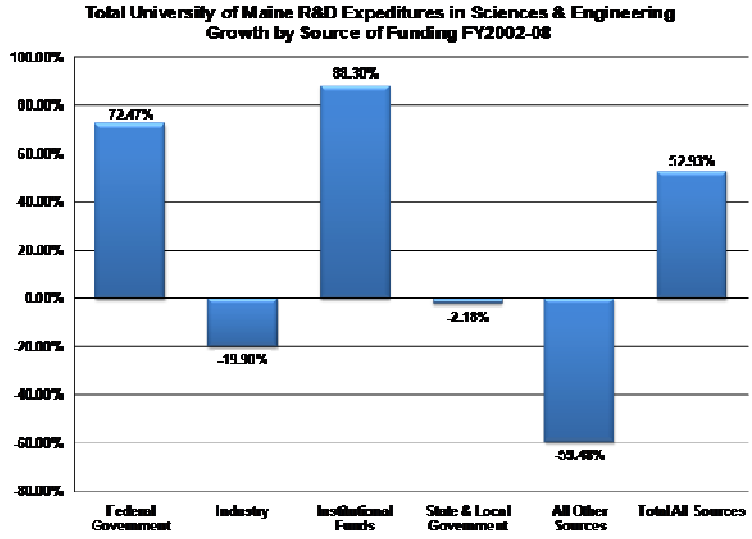
UMaine Performance Summary



UMaine Performance Summary



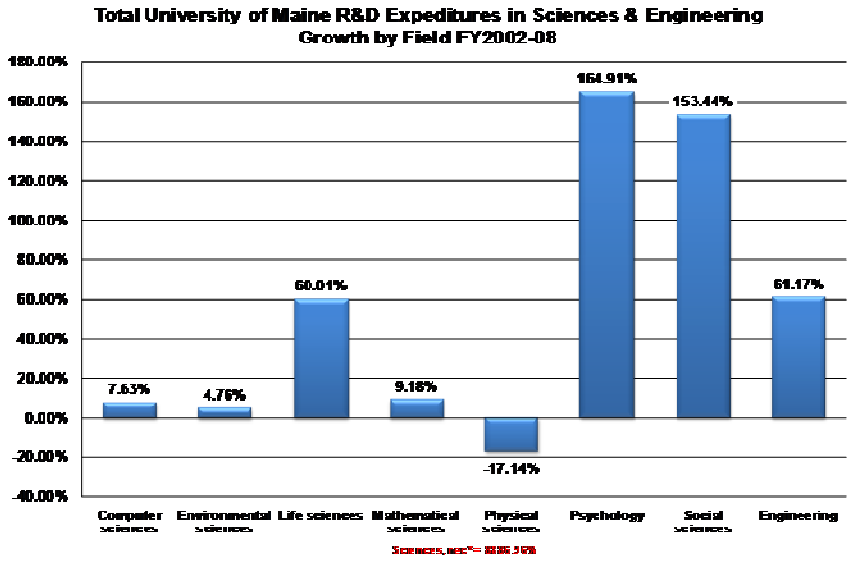
UMaine Performance Summary



UMaine Performance

University of Maine Industry Output Measures - Total 2007-2009	
Variable	UMaine Rank (total reporting)
Number of licensing agreements signed	12
Number of licensing agreements signed with Maine companies	6
License income received	$710,000
Spin-off Companies	2
Number of jobs in these companies at spin-off	6
Source: Maine Comprehensive Research and Development Evaluation 2009	

UMaine Performance



UMaine R&D Specific Industry Strengths

- Advanced Structures and Composites Center (AEWC)
- Laboratory for Surface Science and Technology (LASST)
- New Media Innovation, Research, Development, and Commercialization Center
- The Target Technology Center
- The Foster Student Innovation Center
- The Pulp & Paper Process Development Center
- The Forest Bioproducts Research Initiative (FBRI, with plans to open a 40,000 square foot technology center in 2010 adjacent to Old Town Fuel and Fiber)

UMaine Performance Summary Bottom-line

- The University has made significant progress and in overall R&D performance in the past 15 years and has solidified itself as a serious public research institution
- Additionally the University has strategic focus areas where it is among national leaders
- These focus areas fit well with Maine and regional economic assets/strengths
- There is a commitment to working with industry and R&D commercialization, but the pace can be described as gradual and steady; still in relatively early stages

Data Center Opportunities

- Opportunities for Old Town and Region:
  - Industry growth projected
  - Demand for secure, safe, stable locations
  - IT infrastructure and redundancy – already exists and is being increased through 3-ring binder
- Challenges/Needs:
  - Lower cost energy (.08$/kwh or less)
  - Marketing – Maine not on national radar, region even less so

Energy Rates in Maine

Electricity Rates in Maine for Med. & Large Comm/Industrial Clients

Provider	Standard Offer Supply Rates (¢/kWh)	Average Delivery Rate (¢/kWh)
Bangor Hydro-Electric	6.82	4.21
Central Maine Power	7.15	2.65
Eastern Maine Electric Cooperative	9.15	6.39
Houlton Water	8.60	2.30
Kennebunk Light and Power	11.00	1.01
Madison Electric	4.57	0.10
Maine Public Service	8.95	3.89
Van Buren Light and Power	8.25	3.31

Sources and Notes:

Maine PUC based on latest reports rates at: www.maine.gov/mpuc/electricity/index.shtml

Energy Rates in Maine

Average Retail Price of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through May 2010 and 2009 - (Cents per Kilowatthour)

Region	Commercial		Industrial	
	2010	2009	2010	2009
New England	14.94	16.4	12.52	12.24
Maine	12.45	13.1	9.29	10.54
Middle Atlantic	13.37	12.97	8.43	8.28
East North Central	8.99	8.95	6.28	6.67
West North Central	7.26	7.03	5.47	5.53
South Atlantic	9.17	9.68	6.36	6.63
East South Central	8.99	9.39	5.44	5.92
West South Central	9.05	9.34	6.17	6.83
Mountain	8.53	8.19	5.78	5.69
Pacific Contiguous	11.08	11.04	7.48	7.35
Pacific Noncontiguous	20.08	17.76	19.56	15.73
U.S. Total	9.93	10.07	6.57	6.83

Source: U.S. Energy Information Administration, Form EIA-826, "Monthly Electric Sales and Revenue Report with State Distributions Report.", Report Released: August 11, 2010

Energy Bottom-line:

- There are two key potential differentiating assets which will help sell the park – UMaine and Energy.
- Must work to develop a solution to lower energy costs (electricity, heating, and cooling).
- This will particularly help with manufacturing, biofuels, and data centers.
- There are several solid options being consider including biomass energy provided through OTFF; landfill gas with Cassella, and partnership with university.
- City should move to the next stage and secure action. Also, look into community energy programs.

The Economic Environment of Business Park Development

1. Intense competitive rivalry that already exists between established business parks
2. Existence of abundant substitutes for parks and its related services
3. Extremely high and disproportionate bargaining power of prospective customers
4. High cost and strong bargaining position of suppliers of key inputs, especially electricity
5. Threat of new entrants to the industry by other municipalities and state governments over the next decade increasing supply and possibly leading to overcapacity

Competitive Environment

- There are more than 50 total parks in Maine
- There are more than 170 parks in USA with a University connection

Key Parameters for Assessing Competiveness

- **Degree of Specialization -** Are there specific targeted sectors/types of companies?
- **Brand Identification** - (Maine, Bangor Region, UMaine, Old Town) – Is there brand recognition? How positively is the brand viewed? How strong is that perception?
- **Technology Leadership** - Is there technology leadership in the region and at UMaine including with regard to R&D and commercialization?
- **Cost** – What are relative costs?
- **Relationship with Government**
- **Timeframe from concept to occupancy**

Key Parameters for Assessing Competiveness, Cont'

- **Quality of site, buildings, and infrastructure** – to meet specific needs of business and workers
- **Quality of Ancillary Services** – amenities, parks, trails, extras
- **Flexibility for Customization of Site and Building to Meet Needs** – balance between speed to develop and ability to meet custom needs is needed
- **Fit with Market** – ability to access market/customers
- **Proximity to and Relationship with Suppliers, Partners, Collaborators, Competition** – creates synergies, knowledge spillovers, shared services; adds to brand
- **Workforce** – availability, quality, and cost

Key Parameters for Assessing Competiveness - Cost

- Land
- Building
- Utilities (electricity, water, sewer, heating and cooling)
- Transportation
- Taxes
- All Other
- Level of State and Local Subsidies to Offset Costs
- It is the relative total cost that matters
- Initial capital costs as well as ongoing operating should be considered

Competitive Environment: Maine

- Brewer and Bangor (within the Bangor Maine region)
- First Park (Oakland Maine)
- Libby Hill Business Park (Gardiner Maine)
- Brunswick Landing (Brunswick Maine and site of Brunswick Naval Air Base that has been decommissioned and is going through redevelopment
- Wingfarm (Bath Maine)

Competitive Environment: Brunswick Maine

- Only Brunswick is attempting to develop relationships with higher education institutions as a way to attract and grow business including:
  - Maine Advanced Technology Center – in process of moving to base
  - Southern Maine Community College – will offer branch services at the site
  - University of Southern New Hampshire – had a business program in conjunction with base and will continue to do so
  - Embry Riddle University – Aeronautical related university that had a presence on the Base
  - Bowdoin College – moving their data center to the base; also pursuing a joint program with UMaine that combines several years of liberal arts education with several years of engineering

Competitive Environment: FirstPark Maine

FirstPark in Oakland Maine

- a Verizon "Smart Park"
- Initially the biggest Maine competition in terms of technology parks – it is a planned Park with big public support (collaboration of member municipalities) and shovel ready!
- Moved more towards health services in recent years
- Build out will take 20 years and beyond

Old Town Strengths

- Physical proximity to University of Maine
- Proximity to I-95 and Bangor International Airport (strength relative to some other Maine locations only)
- Physical Proximity to Key Potential Industry/University Collaborators – i.e. Old Town Fuel and Fiber, Sewall
- IT infrastructure and Redundancy
- Proximity to existing University Incubator
- Willing pro-economic development community with history of business and industry

Old Town Weaknesses

- High Cost of Energy (approaching 17 cents per kwh) (relative to national average)
- Poor proximity to major population centers
- Still relatively early stages yet for UMaine as a research institution w/ commercialized innovations, spin-offs, and licenses
- Modest Transportation Infrastructure locally
- Relatively small Size (33 sites): economies of scale will be limited and expansion constrained
- Absence (currently) of a high profile firmly committed anchor
- Greater regional effort and cooperation needed to market region

Old Town Opportunities

- Potential for energy options to change the game in terms of cost, reliability, "cleanliness"
- Highly visible and commercially relevant relationship with University
- Partnerships between Public and Private Sector
- Further Development of Communications Super-Infrastructure

Old Town Opportunities, Cont'

- Superb, flexible, expandable, upgradeable facilities at park and nearby
- Management of Park and Key Relationship Networks
- Ancillary facilities (inside and outside park) designed to promote connectivity and partnership and collaboration and goodwill
- Build Organization and Systems to govern, manage, measure
- Build a strong Management Team to manage park and coordinate relationship networks

Major Industry-wide and specific local Threats

- Continued Overbuild of Capacity Regionally and Nationally
- Unfavorable Energy Cost Curve shifts
- Intense Competitive Response from Established Competing Parks
- New Business / Innovation parks (regionally and nationally)
- Change of plans (including timing) of the University of Maine
- Change of plans (including timing) of key partners such as OTFF
- Lack of continued Public Sector involvement

Requirements of Success:

- The adoption and unwavering implementation by a professional management team of a strategy that deliberately leverages the inherent strengths of the region and proximity to the University of Maine and other stakeholders.

- The resulting plan would have to involve specific initiatives aimed at offsetting some of the structural disadvantages of the region as well as the key structural competitive forces within the industry.

Requirements of Success, Cont':

- Such a strategy and plan would have to provide a clearly differentiated offering with a highly focused set of industries.
- Participating tenant entities (except possibly some government anchor participants and those that can benefit from other unique asset) in the park would necessarily have to be in a position to benefit uniquely from the degree of collaborative knowledge partnership with the University of Maine that could not otherwise be replicated or even nearly achieved without the advantage of close physical proximity. For this reason the early determination as to which specific industries to target to the exclusion of others is vital to success of the venture.

Recommendations

- Create a vision and detailed strategic plan and marketing strategy for the park – prospective businesses need to be confident that there is a focused vision and it will be carried out - Stay focused
- Market regionally
- UMaine must be key partner for marketing site and bringing prospects to the table – long term marketing agreement is needed
- State needs to recognize the importance of this park and partnership with UMaine as a key fit with science technology and innovation plan for increased collaboration between University and industry and achieving commercial potential.

Recommendations

- Energy program must be obtained
- Incentives: make clear, cash is king, establish TIF
- Development process: Speed and readiness are key
- Park amenities will be important: Get rid of smell and provide visually appealing gateways to Old Town and UMaine
- Solidify partnerships with existing interested corporate/private sector partners including

Timeframe: How Much Patience Will Be Needed?

- 1-3 years – good chance at securing a few tenants based on relationships and work to date – “low hanging fruit”

Key pieces needed:

- Demonstrating site readiness/speed to develop and occupy, and local support
- Clearly articulating a long-term vision and commitment

Timeframe: How Much Patience Will Be Needed?

- 3-10 years – more difficult – will depend on strength of marketing/relationship effort and how quickly you can make improvements and provide amenities and translate to business models/needs of prospective clients

Key pieces needed:

- Major information/marketing effort jointly and with UMaine
- Energy program to lower costs relative to other Maine parks
- Site Improvements/amenities that resolve current issues such as OTFF wastewater plant, provide good vision for the park, and demonstrate strong physical connection the UMaine

Timeframe: How Much Patience Will Be Needed?

- 10 years and beyond – unpredictable but keys will be:
  - Becoming location of choice for UMaine and Target spinoffs, licensees, and companies that have relationships.
  - Sustained regional and State marketing to support local effort
  - Full realization of park amenities for tenants

Bottom line:

- ✓ Need to be willing to look at this as a 20-year commitment. Full or near full build-out not likely to occur in 3-10 years. Therefore return on investment if measured on short-term measures likely to fall short
- ✓ But, you have an opportunity through a triad public-private-University that no other community in Maine has to change the economic environment over the course of 20 years

Potential Benefits – The Value Proposition

A new "partnership" between the City and University of Maine could potentially induce multiplier effects upon employment and consumption within the immediate area while supporting retention of graduates within the region. Importantly, the successful operation of the new park could lead to accelerated development rates, and the transfer and commercialization of technologies that would be beneficial to the City, Region, and State.

Discussions & Questions?