# VERMONT BUSINESS ROUNDTABLE

# INVESTING IN STATE SUPPORT FOR HIGHER EDUCATION

### **POLICY BRIEF**

# **Executive Summary**

n January 2004 the Vermont Business Roundtable issued its first report on the vital importance of higher education as a driver of Vermont's 21st century economy. Since that time the need for support of this important economic sector has only become more pronounced. The moment has come to call attention again to the fact that we have made no progress but are in fact falling further behind.

Vermont's prospects for a strong and secure economic future hinge on government's commitment to make significantly greater investment in our state support for higher education.

The reasons are clear:

- This is a huge sector of the Vermont economy, which has increased 70 percent since 2002, and now contributes \$2.9 billion annually in total estimated economic impacts within Vermont yet we still rank 49th in the nation in per-capita support for higher education.
- Thirty-eight of Vermont's 50 fastest-growing occupations require significant post-secondary education, and 46 percent of the estimated 11,587 new workers that Vermont businesses require each year need significant training beyond high school. Yet these opportunities depend on affordable access and we have allowed higher-education debt loads of the neediest Vermont families to rise 167 percent since 1994, from \$14,242 to over \$38,000 this year.
- With today's explosive growth of research institutions in India and China, Vermont must

build support for a vital driver of the competitive economy: campus-based research and innovation. Research contracts and grants at colleges and universities pump over \$150 million into the state's economy, and that money ripples out at the rate of \$5-\$7 per research dollar spent. Even more important, university research creates the technological knowledge that will shape and drive the 21st century economy.

• Vermont now competes in a fast-evolving global marketplace, and our most vital resource is knowledge and the ability to acquire it. College graduates earn far more, cost society far less, and contribute much more than those with only high

# Estimated Overall Economic Impacts of Higher Education in Vermont

The following figures use a multiplier of 2.5, which assumes that for every dollar spent, another \$1.50 is generated and spent within the state.

University of Vermont, Total Expenditures:	\$453,127,000
x multiplier	× 2.5
Estimated Overall Economic Impact	<b>\$1,132,817,500</b>
Vermont State Colleges, Total Expenditures:	\$141,157,992
x multiplier	× 2.5
Estimated Overall Economic Impact	<b>\$352,894,980</b>
Independent Institutions, Total Expenditures:	\$577,318,786
x multiplier	× 2.5
Estimated Overall Economic Impact	<b>\$1,443,296,965</b>
Public & Private Institutions, Total Expenditures:	\$1,171,603,778
x multiplier	× 2.5
Estimated Overall Economic Impact	<b>\$2,929,009,445</b>

Source for Expenditures: FY 2006 IPEDS Finance Survey.

Source for "multiplier": Recently economists have provided multiplier effects from 2.0 to 2.5 to 4.0.

school backgrounds.Yet low levels of state support for higher education in Vermont have contributed to high and rising tuition, narrow budget margins for public colleges, significant deferred maintenance, and a limited ability to provide competitive facilities, salaries, and programs.

In Ireland and Kentucky, which have also long struggled with rural poverty and limited opportunity, visionary investment in higher education access and support have borne remarkable fruit. Ireland is now a widely renowned "economic miracle," and Kentucky is now fourth in the nation in site selection for business. Vermont can do much the same — and we must start now.

"A well-educated workforce means good jobs, and good jobs mean higher pay," notes Bill Stritzler, CEO of Smugglers' Notch Resort, Vice Chair of the Roundtable, and co-chair of the group that produced *Having the Courage to Change: How We Can Avoid the Coming Workforce Crisis.* "Higher pay means more revenue to the state ... and more revenue means being able to take care of our social needs, including higher education.

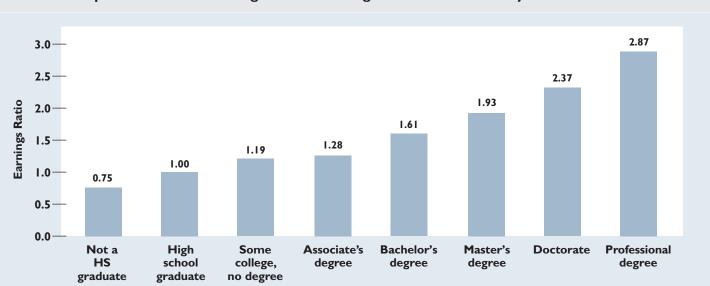
"You have to have a good degree of vision, because this frequently involves investment in the front end that yields a return in four or five years," Stritzler adds."Once we get that process started, it becomes regular and cyclical. And it is good for the people of Vermont."

# The Power of Investing in Higher Education

For both our present and our future prosperity, **state investment in our human capital is the single most powerful strategy Vermont can adopt for our economy and our future.** Significantly boosting state support for higher education will build our state's ability to compete and move forward as a 21st century economy. Postponing these investments will push us in the opposite direction — toward the rear in the rigorous competition for prosperity in the global marketplace.

Right now, higher education contributes enormously to our state's well-being. The 23 full-time institutions in this unusually "clean" economic sector employ almost 11,000 people, paying over \$632 million in annual wages and benefits. Research grants bring in over \$150 million per year as they help develop technologies and solutions for our future. Overall, the estimated economic impacts of higher education in Vermont are a staggering \$2.9 billion per year. (See chart 1.)

The impacts on individual Vermonters are just as clear. A person with a bachelor's degree will earn 60 percent more, projected over a lifetime — and will pay twice as much in taxes — compared to someone with only a high-school diploma. A Vermonter with a master's degree will earn 93 percent more. College graduates are far more likely than high school grads to vote, volunteer, and



#### Expected Lifetime Earnings Relative to High School Graduates by Education Level

Source: Education Pays 2007: The Benefits of Higher Education for Individuals and Society. Sandy Baum and Jennifer Ma. The College Board: 2007.

join in civic and community activities. A person who has not gone to college is 12 times more likely to spend time in prison than someone who has. Despite these compelling facts, the number of ninth graders deciding to not pursue college has increased 121 percent since 1997.

Vermont's economy has changed and we now face competition on a worldwide scale. We now rely chiefly, not on raw materials or natural resources, but on knowledge and innovation, and the opportunity to acquire and use these vital assets. According to the Roundtable's 2006 report, *Having the Courage to Change: How We Can Avoid the Coming Workforce Crisis,* 38 of Vermont's 50 fastest-growing occupations — including six of the 10 fastestgrowing jobs — require significant post-secondary education. Along with educating nearly 20,000 Vermonters every year, our colleges and universities attract over 21,000 talented out-of-state students annually — and many of those young people will stay here and contribute.

But we face serious challenges. Vermont still ranks 47th in the nation in state support for higher education, measured per \$1,000 in personal income. Per capita, we rank 49th, just as we did in 2004.

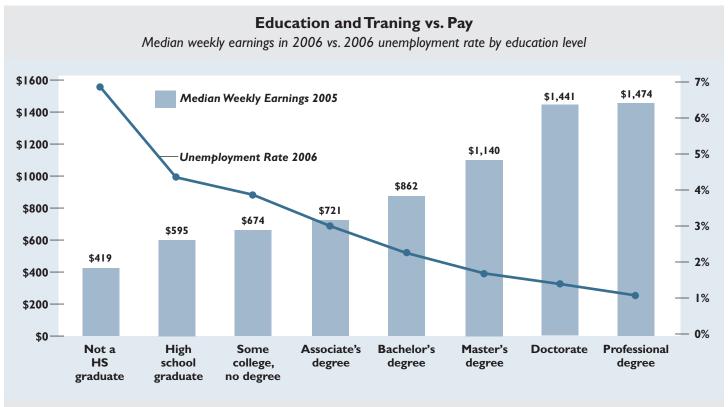
According to the Vermont Commission on Higher Education Funding (CHEF), "higher education debt loads of the neediest Vermont families increased to more than \$38,000 in FY07," up \$5,000 in just one year.

Adds CHEF, "Past levels of funding for higher education have resulted in high tuition and fees among our public institutions, narrow budget margins, significant deferred maintenance ... and difficulty in providing the types of academic services and equipment that would make us more competitive with other states."

We must not ignore the urgent need to increase significantly our state's support for higher education. Put simply, our future economic success depends on this.

# Campus Research and Innovation Drives the Competitive Economy

Research contracts and grants at Vermont colleges and universities pump over \$150 million into the state's economy, mostly from out-of-state government, foundation, and corporate sources. What's more, research dollars have an unusually large, estimated economic-multiplier effect—as much as \$5-\$7 dollars in the community for every research dollar spent.



Source: U.S. Department of Labor, Bureau of Labor Statistics

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Even more importantly, university research creates the technological knowledge that will shape and drive the 21st century economy. Nationally, the university-based discovery of recombinant DNA gave birth to the biotech industry. Research at UVM and other land-grant colleges has developed high-yield, disease-resistant crops to make American agriculture the world's most productive; and university-based military research into electronics has given us computer science, satellite communications, robotics, miniaturization, and the Internet.

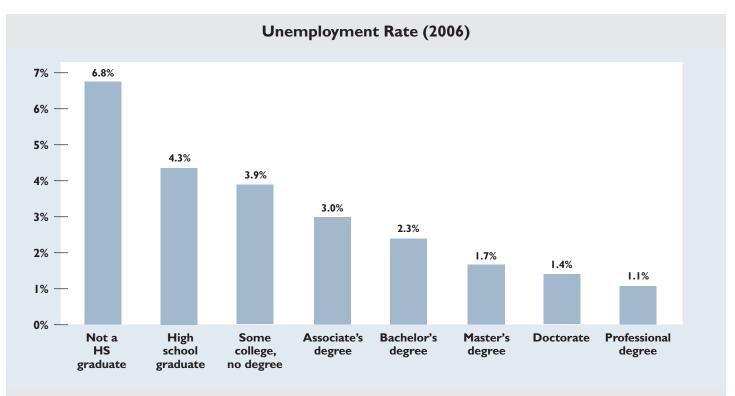
Today in Vermont, Norwich University researchers are enhancing cyber security; Middlebury College faculty and students are probing the impacts of climate change; UVM scientists are on the brink of commercializing a powerful phosphate filter to control farm and urban effluent — and many researchers from Vermont institutions are working in their communities to help solve real-life business and social problems.

With today's explosive growth of research institutions in India and China, our state must partner with the federal government, the private sector, and the institutions to provide the funding that can keep university laboratories, equipment, and faculty productive and competitive.

# Shining Examples and "Economic Miracles"

Investing boldly in higher education can have economic impacts that are almost astonishing. In the 1980s, as *Having the Courage to Change* describes, the economy of Ireland — long one of Europe's weakest — was sagging badly with unemployment, emigration of college graduates, and fast-rising national debt. But in a single generation, Ireland has become the world-renowned "Celtic Tiger," home to top pharmaceutical, medical-supply, and software companies, and to enormous growth in direct foreign investment and the size of its employed workforce. The often-cited key to this "economic miracle" was that, as part of a coordinated approach to workforce development, in 1996 Ireland made a college education virtually free.

In Kentucky — which has, just like Vermont and Ireland, long struggled with rural poverty — a statewide "Education Pays" initiative began in 2000 to focus on making post-secondary education affordable, preparing citizens for it, and measuring progress. Results: the number of degrees awarded has risen by 45 percent — and Kentucky is now fourth in the nation in site selection for businesses. Over 60,000 new jobs have been created in the past two years, and more Kentuckians were employed in 2005 than ever before in the state's history.



Source: U.S. Department of Labor, Bureau of Labor Statistics

# Today's Urgency: Turning the Affordability Tide

For Vermonters needing and wanting higher education, affordability equals accessibility equals opportunity in life — yet we have been moving in the other direction. According to the Roundtable's 2004 report *Becoming "The Knowledge State": The Vital Importance of Higher Education in Vermont's 21st Century Economy*, indebtedness among Vermonters receiving Vermont Student Assistance Corporation (VSAC) grants for college generally the neediest of Vermont students — rose by 91 percent from 1994-2003.

The average family's loan debt accumulated by senior year, among VSAC aid recipients, rose from \$14,242 to \$27,188 from 1994-2003 — and, again, to over \$38,000 in FY07. It is no wonder then, that among students who identified affordability as a reason for not continuing their post-secondary education, one-quarter specifically cited not wanting to assume the loan debt necessary to obtain a degree.

With tuition costs continuing to rise — and needed investments in our public colleges often deferred for lack of funds — Vermont is failing to gain the benefit we require from the higher-education resource we have. The number of Vermont high-school graduates leaving the state for college has increased to 54 percent, among the nation's highest and far above the national average of 19 percent. Yet Vermont businesses now need to find an estimated 11,587 new workers each year — and 46 percent of those workers will need significant training beyond high school.

#### Total Expenditures by Vermont Higher Education Institutions Fiscal Year 2006

University of Vermont ......\$453,127,000

#### Vermont State Colleges

Castleton State College	\$31,181,540
Community College of Vermont	\$23,696,062
Johnson State College	\$24,679,056
Lyndon State College	\$23,635,921
Vermont Technical College	\$30,417,579
VSC, Office of the Chancellor	. \$7,547,834

Total, Vermont State Colleges... \$141,157,992

#### **Independent Institutions**

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Bennington College \$25,192,421	
Burlington College \$2,156,143	
Champlain College \$37,342,526	
Goddard College \$7,418,272	
Green Mountain College \$14,530,786	
Marlboro College \$11,496,853	
Middlebury College \$169,390,000	
New England Culinary Institute \$24,008,675	
Norwich University \$70,698,000	
Saint Michael's College \$63,755,000	
School for International Training \$93,719,735	
College of St Joseph \$4,894,071	
Southern Vermont College \$6,375,215	
Sterling College	
Vermont Law School \$19,981,052	
Woodbury College	
Landmark College \$21,089,386	
Total, Vermont Independents \$577,318,786	
Total Expenditures, All Public and	
Private Institutions \$1,171,603,778	

Source: FY 2006 IPEDS Finance Survey.

# "You Have to Have Vision"

"I had the privilege of spending nine years on the Vermont Economic Progress Council, with the responsibility to provide tax credits to businesses that were going to either come to Vermont or expand in Vermont, and create good jobs," notes Bill Stritzler, CEO of Smugglers' Notch Resort, Vice-Chair of the Roundtable, and co-chair of the group that produced *Having the Courage to Change* report. "The tax credits were nice — but the number one decision-making criterion was whether or not

we had a qualified workforce that people could use in their business.

"Qualified equals well-educated," Stritzler continues. "A welleducated workforce means good jobs, and good jobs mean higher pay. Higher pay means more revenue to the state, without having to raise taxes — and more revenue to the state means being able to take care of our social needs, including those of higher education. So it's a cycle.

"You have to have a good degree of vision, because this frequently involves investment in the front end that yields a return in four or five years," he concludes."Once we get that process started, it becomes regular and cyclical. And it is good for the people of Vermont."

### Sources

Higher Education:Vermont's Economy Depends on It. The Commission on Higher Education Funding, January 29, 2008

Having the Courage to Change: How We Can Avoid the Coming Workforce Crisis. The Vermont Business Roundtable, 2006.

Becoming "The Knowledge State":The Vital Importance of Higher Education in Vermont's 21st Century Economy. A Report from the Vermont Business Roundtable, January 2004.

# **Policy Recommendations**

The Vermont Business Roundtable endorses an integrated, statewide vision for higher education that:

- Encourages the growth of our wide diversity of public and private institutions in Vermont, such that they continue to complement each other rather than detract from each other;
- Recognizes the vital role that education plays in fostering a healthy economy through various business retention and recruitment strategies, including access to education and training opportunities for Vermont high school graduates and returning adult learners;
- Improves the affordability and accessibility of higher education for Vermont's students by increasing to 40th, within five years, Vermont's state ranking in terms of public funding for higher education;
- Provides access for every Vermont business to Vermont's intellectual community, and encourages

and supports the development of college and university incubators.

For its part, the business community recognizes that it has an obligation to actively work toward fulfillment of this vision, by:

- Actively collaborating with the higher education system to help fulfill the vision for higher education in Vermont;
- Addressing the long-term capital investment needs for facilities and programs by partnering with higher education in the creative identification and solicitation of sources of capital funds; and
- Advocating for the long-term affordability of higher education in Vermont and its competitiveness in regional and national markets for a shrinking pool of graduating high school seniors.

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Created in 1987 as a nonprofit, public interest organization, the Vermont Business Roundtable is comprised of 110 CEOs of Vermont's top private and non-profit employers dedicated to making Vermont the best place in America to do business, be educated and live life, through collaboration, research and analysis, and communication and advocacy. Member businesses employ 35,000 employees and represent virtually every industry and geographic region of Vermont.

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