



## **Regional Council of Mayors**

May 14, 2012

### **PRESENTATIONS**

#### **Creating Global Knowledge Hubs**

To be competitive in the global economy, nations and regions must be the most attractive locations for knowledge-intensive industries, said Torger Reve, professor who holds the Wilh Wilhelmsen Chair in Strategy and Industrial Competitiveness at BI Norwegian School of Management.

Reve said he studied 13 cluster industries and saw the shift from business as manufacturing to business as clusters to business as global knowledge hubs. Education is at the center of a nation or region's ability to be competitive, he said.

Reve's research shows that for a successful future, businesses must be:

- Knowledge-based. "That's why universities need to be center stage."
- Climate-robust. Successful, competitive businesses will meet new environmental regulations and requirements.
- Global.
- Change-driven. "We tend to cement old structures."

Business as manufacturing involves a business converting raw materials into products, then getting feedback (reaction from purchasers) and modifying the products and the processes based on that.

Business as industrial clusters has an industry at the core, surrounded by all of the other businesses and systems that impact or are impacted by it. For example, the shipping industry is the core of a cluster that includes everything from ship design to fisheries to maritime lawyers to shipping brokers and more.

Business as a global knowledge hub has research, education and innovation at the core. The next level is competent investors and venture capital. "You compete based on who gets the best talent and who gets the best technology," Reve said. "Competent ownership is long-term ownership and knowledge." Industrial functions are the next tier of a global knowledge hub.

In the United States, Boston is a global knowledge hub for the health sciences, the Silicon Valley is the global knowledge hub for high tech and Houston is the global knowledge hub for oil. “If you’re in biotech, you have to be in Boston,” Reve said. “The universities there play a major role, then it starts with small biotech firms, then big pharma.”

In Minnesota, the medical device industry is the best example of what can be a global knowledge hub.

“Global knowledge hubs are centers of gravity attracting talent, investment and innovation on a global scale,” Reve said.

He described the “emerald”: the six factors of “attractiveness” on which a global knowledge base can be built:

- Cluster attractiveness. How well the industry has been developed in this location.
- Educational attractiveness. The extent to which the education institutions fit the industry.
- Talent attractiveness. The proportion of talent in the industry that is in the location.
- Research and development attractiveness.
- Ownership attractiveness.
- Environmental attractiveness. How well the businesses in this area meet and will meet environmental regulations.

To attract and build global knowledge hubs, Reve said regions or nations must:

- Develop world-class universities and research facilities.
- Attract global centers of excellence.
- Attract talent on a global scale.
- Use tax incentives for knowledge investments.
- Encourage venture capital to commercialize innovation.
- Build critical industrial mass.
- Develop a global brand.

### **Higher Education Task Force: Partnerships for Prosperity**

Torger Reve said that education—specifically universities—is at the core of creating a global knowledge hub, which set the stage nicely for a presentation by leaders of the three college and university systems in Minnesota: the University of Minnesota, Minnesota State Colleges and Universities and private colleges.

The Higher Education Task Force of the Itasca Project is charged to identify strategies that should be implemented to drive long-term, sustainable economic growth and prosperity, said Eric Kaler, president of the University of Minnesota. The task force includes educators and leaders of major industries in Minnesota.

“We decided to start with the facts and to roll out a final version in just a few months,” Kaler said. The group gathered facts about what appear to be areas of opportunity beginning last November. In February and March 2012, it developed a set of strategic priorities. Currently, it’s in the stage of developing specific action steps. This summer, the actions and findings will be rolled out publicly.

“Higher education has a large impact on employment and wages, with significant spillover benefits for the regional economy,” said Brian Rosenberg, president of Macalester College. In fact, he said, the economic value of a college degree has increased in the past three to four years, even during a recession. “When your population is more educated, everyone—no matter what degree of education—tends to be paid more.”

The United States has had an advantage, but it’s slipping, Rosenberg said. For people age 35–64, 39 percent have an associate’s degree or higher. This is second only to Canada, with 44 percent in that age range having a post-secondary degree. But for those ages 25–34, the percentage with an associate’s degree is also 39, but that is tenth among the nations studied.

Minnesota’s higher education system has several strengths:

- A comparatively high level of post-secondary attainment (the eighth highest in the United States).
- World-class research institutions. “The University of Minnesota is well above its weight class,” Rosenberg said, “and the Mayo Clinic is a world leader in research.”
- Home to successful models of new thinking in higher education, including on-line universities and collaborative programs among institutions.
- A strong and diverse business community, with the second highest number of Fortune 500 companies per capita in the United States.

Rosenberg said there are four areas in which Minnesota could make changes to become a globally competitive center:

### ***Workforce alignment***

“We need to get the right graduates in the right places with the right skills to get the job done,” said Steve Rosenstone, chancellor of MNSCU. He said that almost every industry in the state sees a gap in the skills they need and that available graduates have. “We need to be more deliberative and intentional about supplying what’s not there.” The skill gap is not always technical skills; it may include “soft” skills such as communication.

### ***Ecosystem of research and innovation***

“We are, in many senses, the Silicon Valley for the food industry and the medical device industry,” said Kaler. “It’s an ecosystem, an interaction among the institutions, the business community and government.” He said the University of Minnesota is the eighth largest public research institution in the United States,

while it's only 22<sup>nd</sup> in size of population. "Minnesota is a hot-spot for research and innovation, attracting technical and entrepreneurial talent from around the world."

### ***Collaboration among higher education systems***

The variety of the education systems in Minnesota is an advantage, said Rosenberg, but the four systems (including for-profit schools) need to find ways to work together. "We need to treat the four systems as a coherent entity," he said. "We want to leverage the strengths of each system and eliminate redundancy."

He said this kind of collaboration is already going on, particularly in the area of technology, but the hardest place for the systems to collaborate is in academic programming.

### ***Graduating more students***

Rosenstone said that for every 100 high school graduates, only 36 end up with a post-secondary degree. The two most powerful predictors of whether a new post-secondary student will complete a degree of some kind are the student's academic credentials coming in and financial need. "Over the last couple years, the financial barriers have increased," he said. "The higher the financial barrier to completing your education, the less likely you will be to do so."

About 80 percent of the jobs created between now and 2018 will require some kind of post-secondary education, Rosenstone said. "We also need to think about how we demonstrate that graduates have the skills that are needed."

Minnesota's funding cuts to education are higher than the national average (35 percent from 2000 to 2010, versus a 20 percent cut in funding nationally). "We are moving toward the bottom quadrant," said Rosenberg. "If we continue on this path, in five or 10 or 20 years, we won't be able to say credibly that Minnesota is an education state."

"Deinvesting in human capital doesn't seem like a great strategy," Rosenstone said. "In this century, not having a post-secondary education means you are condemned to a life of poverty."

The Higher Education Task Force report will be just the beginning of a long-term project, Kaler, Rosenberg and Rosenstone said. It's a new way of thinking about higher education.

"What's at risk here is nothing short of the quality of life in Minnesota," said Rosenstone.

## **METRO WATCH**

### **Twin Cities a Model for Cooperation**

RCM Co-Chair Jim Hovland and ULI MN Executive Director Caren Dewar both attended the ULI spring meeting in Charlotte, NC. Hovland was part of a panel on regional cooperation. Hovland said, "Nobody cooperates with anyone else in other parts of the country the way we do here."

## **COMING UP**

The June RCM meeting will be combined with the ULI MN Housing Summit on Thursday, June 7, 8–11 am. There will not be a meeting on Monday, June 11.

The July RCM meeting will be 11:30 am–1:30 pm, Monday, July 9 at Dorsey & Whitney.

RCM meetings are held on the second Monday of every month at Dorsey & Whitney. Mayors are encouraged to email Caren Dewar with their suggestions for topics to add to the agenda.

## **ATTENDEES**

The following individuals were in attendance on May 14, 2012:

### **Mayors**

Doug Anderson, City of Dayton; Ardell Brede, City of Rochester; Jerry Faust, City of St. Anthony; Tom Furlong, City of Chanhassen; Mary Giuliani Stephens, City of Woodbury; Debbie Goettel, City of Richfield; Kathi Hemken, City of New Hope; Mary Hershberger-Thun, City of Victoria; James Hovland, City of Edina; Tim Hultmann, City of Long Lake; Marvin Johnson, City of Independence; Dean Johnston, City of Lake Elmo; Elizabeth Kautz, City of Burnsville; Sandra Krebsbach, City of Mendota Heights; Alan Lindquist, City of Osseo; Mike Maguire, City of Eagan; Sandy Martin, City of Shoreview; Gene Maxwell, City of Hopkins; Terry Schneider, City of Minnetonka; John Sweeney, City of Maple Plain; Brad Tabke, City of Shakopee; Nancy Tyra-Lukens, City of Eden Prairie; Ken Willcox, City of Wayzata; Janet Williams, City of Savage; Gene Winstead, City of Bloomington;

### **Guests**

Jason Aarsvold, City of Brooklyn Park; Chace Anderson, Wayzata Schools; Ron Anderson, Century College; Clark Arneson, City of Blaine; Bake Baker, McGough Development; Doug Baker, Ecolab; Katherine Blauvelt, Office of

Senator Franken; Jeff Brosz, Rasmussen College; Colleen Carey, The Cornerstone Group; Rick Carter, LHB; Randy Clegg, Burnsville Schools; Tor Dahl, University of Minnesota; Beth Elliott, Minneapolis CPED; Ellen Ewald, Tysvar; Andrew Ferstar, Greater Twin Cities United Way; Tom Fisher, University of Minnesota; Angie Freeman, C.H.Robinson; Matt Fulton, City of Coon Rapids; Héctor García, Chicano Latino Affairs Council; Loretta Hazlett, Tor Dahl & Associates; Dan Hoverman, Mounds View Schools; Jeralyn Jargo, Century College; Madeline Koch, Comcast; Jay Lindgren, Dorsey & Whitney; Kevin Locke, City of St. Louis Park; Mike Logan, Comcast; Jim McDonough, Ramsey County; Dan Mehls, Mortenson Construction; Terje Mikelsen, Tysvar; Katie Misukanis, Rasmussen College; Lee Munnich, Humphrey School; Burke Murphy, Regional Cluster Initiative; Scott Neal, City of Edina; Carolyn Olson, Greater Minnesota Housing Corporation; Todd Otis, Think Small; Cathy Polasky, City of Minneapolis; Ted Redmond, Leo A. Daly; Megan Roberts, Humphrey School; Carolyn Roby, Wells Fargo; Elizabeth Ryan, Family Housing Fund; Sharon Sayles Belton, Thomsen Reuters; Matt Schmit, Humphrey School; Ken Sorensen, Mortenson Construction; Ann Swenson, City of Edina; Jeff Weisensel, City of Rosemount; Dean Zuleger, City of Lake Elmo;

**ULI Minnesota Staff**

Caren Dewar, Cathy Bennett, Katie Anderson, Linda Picone