

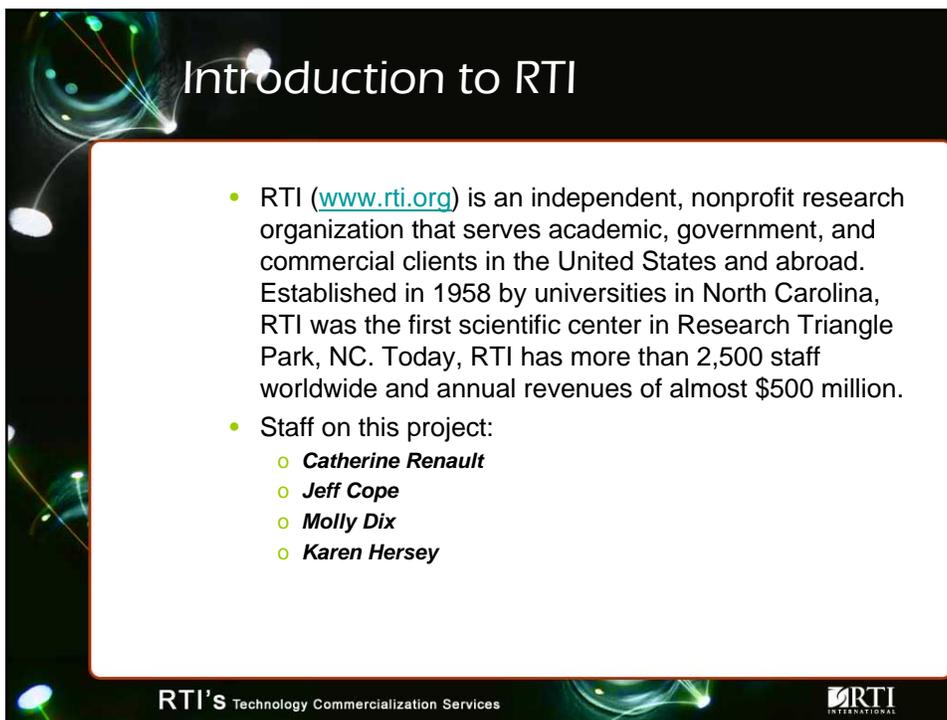
Intellectual Property and Technology Commercialization in North Dakota

A Study for the
North Dakota Department of Commerce and
the State Board of Higher Education

Presentation to the Interim Committee on Economic Development, North Dakota Legislative Council

July 19, 2006

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Introduction to RTI

- RTI (www.rti.org) is an independent, nonprofit research organization that serves academic, government, and commercial clients in the United States and abroad. Established in 1958 by universities in North Carolina, RTI was the first scientific center in Research Triangle Park, NC. Today, RTI has more than 2,500 staff worldwide and annual revenues of almost \$500 million.
- Staff on this project:
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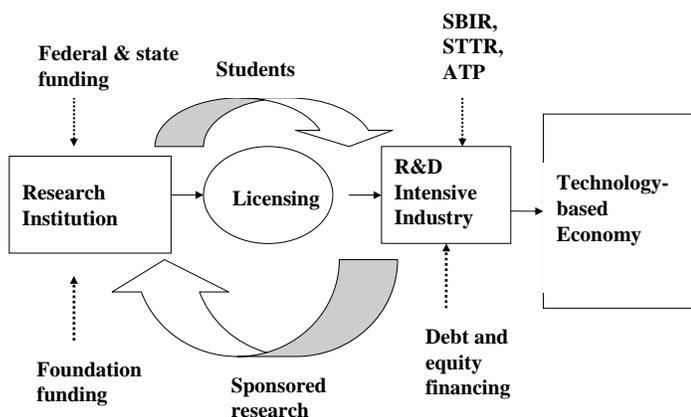
Objective of the Study

- In last session, Legislature directed the Department of Commerce and the State Board of Higher Education to conduct two studies:
 - Study of incentives the state could adopt to “serve as catalysts for stimulating more efficient commercialization of new technologies”
 - Study of ND intellectual property rights as they relate to the protection of IP rights
- Since the topics are so intertwined, RTI performed these studies as one.

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Technology-based Economic Development



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Six Areas of Focus for Study

- Research Capacity
- Intellectual Property and Technology Transfer
- Entrepreneurship
- Access to Capital
- Cluster-based Economic Development
- Organizing to Support Science and Technology-based Economic Development

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Research Capacity

- Conclusions:
 - ND has invested to expand the research enterprise.
 - Center of Excellence Program and EPSCoR funding have been put to good use.
- Recommendations:
 - Recruit more senior faculty (Georgia Research Alliance model).
 - Expand industry-sponsored research.
 - Amend R&D tax credit to be higher in first increment; potentially specific industries, distressed areas.

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Intellectual Property and Technology Transfer

- Conclusions
 - States are limited in ability to influence IP laws.
 - States can provide friendly IP environment for companies, especially those in highly competitive, IP-dependent markets.
 - SBHE has done a credible job in adopting IP and TT policies and in delegating authority to the universities.
- Areas for improvement:
 - Protect private, nonpublic competition-sensitive information from public disclosure.
 - Noncompete laws also put certain companies at risk of public or competitive disclosure.

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Intellectual Property Recommendations

- All stakeholders should convene to consider these options:
 - Boosting exclusion definitions under §44-04-18.4
 - Special legislative initiatives directed at protecting research and commercialization activities of state universities (Michigan example)
 - Promulgation of special rules by SBHE
 - Restructuring of NDSU/RF or legislatively adopting language to allow RF that are not public entities (Colorado example)
- Research Foundations and Public Entities
 - Investigate overall effect of AG's opinion relative to 501(c)(3).

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Intellectual Property Recommendations, continued

- Trade Secrets
 - North Dakota should clarify §44-04-18.4 to protect from disclosure, any and all trade secret information, within the meaning of N.D.C.C. §47-25.1, belonging to a business organization that is in the possession of a public entity.
- Noncompete Agreements
 - Replace the existing provision of North Dakota law §9-08-01 to recognize the enforceability of noncompetition clauses.
- SBHE Policies
 - Some policies need to be reconsidered.

Entrepreneurship

- Conclusions
 - There are approximately 1000 of high-technology companies in the state, mostly entrepreneurial.
 - Most of the existing entrepreneurial support organizations have limited expertise for support of high-growth and/or high technology companies.
 - University programs are competent, but resource constrained.
- Recommendation
 - Invest in a high quality program to support the entrepreneurial climate, train high-technology entrepreneurs and enable mentorship connections within the community.

Access to Capital

- Conclusions
 - Financing technology commercialization is different than financing small business.
 - North Dakota has done an adequate job supporting the SBIR/STTR program.
 - North Dakota has received almost no venture capital investment.
 - North Dakota has a seed capital investment tax credit.
 - North Dakota has a wide variety of debt programs, but most are not aimed at companies that commercialize technology.

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Access to Capital

- Recommendations
 - North Dakota should institute at least one grant or investment program for companies that are commercializing technology. This funding should bridge the gap between university research funding and venture capital funding.
 - North Dakota should direct the Bank of North Dakota to modify the criteria for the New Venture Capital Fund to enable investments in early-stage, pre-revenue companies.
 - North Dakota should invest more in assisting SBIR/STTR applicants and winners.

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Cluster-based Economic Development

○ Conclusions

- Many states are focusing on a cluster-based strategy for economic development.
- Clusters include innovation assets and institutions that support the interactions, not just the firms.

○ Recommendations

- North Dakota should inventory its innovation assets.
- This inventory should help refine the technology clusters, allowing alignment with other programs such as Centers of Excellence, incubators, grants, etc.
- Clusters should form the basis for organizing to deliver services, target investments and strengthen networks.

Organizing to Support Science and Technology-based Economic Development

○ Conclusion

- Forty-seven of the states have an organization for policy guidance and/or direct technical assistance to technology companies.
- The three states that do not are Montana, North Dakota and South Dakota.

○ Recommendation

- The North Dakota legislature should establish a dedicated Office of Science and Technology within the Department of Commerce.
- The Office should advise the Governor on science and technology, manage programs such as the Centers of Excellence, track the success of science and technology initiatives through benchmarking and ongoing evaluations.