

2005 -2008 Strategic Plan



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Higher Education Committee

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1. Introduction

Purpose of this report

SIRTI has enjoyed some notable successes. Over time, it has made improvements to its core service of assisting start-up technology businesses.

SIRTI is now strategically positioned to do even better. It is time for SIRTI to transform and model - in more pronounced ways -- the characteristics of an entrepreneurial and client -focused service organization. Indeed, the value of SIRTI's coaching and support is directly linked to the level of sustainable success achieved by its clients. To this end, SIRTI will strengthen its capacity to effectively serve start-up and high growth businesses of the Inland Northwest, helping bridge the often encountered gaps in planning and execution. In turn, the odds of client success will improve, business survival rates will rise, growth will accelerate, and more jobs will result.

The SIRTI Leadership Team is pleased to present this document as a chart of SIRTI's course forward. This framework has been discussed at length, and has been adopted by the SIRTI Board of Directors. It is offered for the consideration of the Legislature and other stakeholders. The SIRTI leadership team invites your ideas, comments, and criticisms for how to best refine the course and to assure that the investment of talent and resources in this organization yields the best outcomes for all concerned.

2. Executive Summary

The goal of this Strategic Plan is to engage all stakeholders -- our boards, the communities we serve, State government and our partners -- around the question of how SIRTI can best serve its mission. This plan has emerged from the first retreat by the SIRTI board, and the SIRTI Foundation board, in several years. The retreat convened around the issue of clearly establishing the future path of this small agency.

Central to the process was a re-examination of SIRTI's mission. This was reaffirmed as one working with *companies*.

Our mission is to accelerate the development and growth of technology companies in the Inland Northwest, especially in Eastern Washington.

Discussion of the Plan also dealt with the question of SIRTI's core purpose. It was widely agreed by the two boards that SIRTI's role is one of a *catalyst* for the transformation of the regional economy. As such, the success of SIRTI will depend on its own ability to execute against its mission as well as contributing to the success of other participants in the technology sector of Eastern Washington. Our strategy will be to capitalize on our strengths, to build accountability (both internally and externally) and rely on a higher degree of teamwork to mitigate our weaknesses. Our constant aim will be to return substantially more value to the citizens of the State of Washington than they have invested in SIRTI.

Five key strategic challenges were identified for SIRTI. They are:

◆ **Sharpening the vision and mission of SIRTI and the SIRTI Foundation**

While the original legislation creating SIRTI specifically discussed a role in undertaking and funding research, the overwhelming consensus of the boards now was that the appropriate role for SIRTI is to focus on *companies* as engines of research commercialization, job creation, and associated economic impacts.

◆ **Aligning SIRTI's financial and human resources with the mission**

SIRTI should be designed to be reflective of the client companies it serves. That is, it should operate with a more entrepreneurial culture. It was noted that in other locations, state-funded organizations such as SIRTI are often structured as IRC 501.c.3 entities. Since a significant legal restructuring is not likely to take place in the near term, the SIRTI organization will work to overcome the challenges without pursuing the restructuring in the near term.

◆ **Ensuring the sustainable success of the SIRTI Technology Center (STC)**

The locally and federally funded STC will come on stream in December of this year. Extensive activity is under way to attract and secure appropriate tenants.

◆ **External and internal accountability**

Completing its 10th year of operation, SIRTI is just now seeing substantial follow-on financing activity among its former clients and DARPA grant recipients. To date, that composite number exceeds **\$130 million**. Indeed, of the original 35 DARPA award recipients, 23 companies are still going strong. However, more information is needed for these companies and companies assisted since then. As a result, 11 metrics will be tracked for SIRTI alumni, incubator tenants and commercialization clients. Information for some metrics will be easier to gather than for others. Most are outcome-based and include the measures currently tracked by OFM. Please refer to **Appendix A** for a complete listing of companies served by SIRTI life-to-date.

◆ **Creating strong strategic partnerships**

Successfully managing strategic partnerships will be critical to the success of SIRTI. Achieving these objectives will require clear identification and mapping of the different roles and activities of current and potential partners. This document presents a draft map of the various roles played by groups and organizations central to these partnerships. **Appendix B** provides both a detailed matrix of partnership relationships as well as a detailed narrative.

The Strategic Plan contains a discussion of the economic environment in which SIRTI operates. In contrast to the central Puget Sound area, this region has not enjoyed an abundance of the necessary pre-conditions for technology-based economic development.

Central to the document is a discussion of two dimensions of SIRTI's delivery of services. First is an explanation of SIRTI's two core competencies: *commercialization* assistance and the operation of a technology incubator with critical management assistance (sometimes referred to as *accelerator* skills). The Plan describes the client selection process, touches on the service delivery particulars and notes the graduation or exit policies SIRTI takes toward its clients.

The second dimension concerns the kinds of firms that SIRTI helps. *Start-ups* have traditionally been the focus of SIRTI's attention. This will continue. However, a promising new area of operation lies in assisting *high growth* companies, technology firms that have sales but face difficulty managing growth. This plan also notes that SIRTI will not abandon its traditional activity in technology transfer. However, due to the time- and resource-consuming aspect of technology transfer, it cannot currently be central to our daily activity.

The plan notes SIRTI's success in obtaining additional funding to its activities, largely from Federal sources. SIRTI intends to continue to leverage the State investment by securing funding from non-State sources.

Board composition is recognized as another key factor in positioning SIRTI to be able to respond effectively to its entrepreneurial clients. SIRTI will work with the Governor's office to create, over time but as quickly as possible, a board rich with technology business experience.

An operational plan that provides detail and timeline to this Strategic Plan will be available shortly. It will contain abundant detail of our commercialization and acceleration approach. It is SIRTI's desire not only to continuously improve but to strive for excellence among all organizations working to transform the economy of the Inland Northwest so, we continuously seek the feedback of our stakeholders.

3. SIRTI Mission

SIRTI mission affirmed by the Board of Directors

Since inception, SIRTI has modified its mission and has attempted to live up to a broad array of expectations. Most of the initial expectations of SIRTI were formed when SIRTI enjoyed \$15 million in Defense Advanced Research Projects Agency (DARPA) funding available for award to companies on a sub-grant basis. Since SIRTI is advantageously positioned at the intersection of business, academia, and government, it was tugged in several directions in the first few years of its existence. From the beginning of this decade, however, it has largely restricted its activities to helping companies. At this juncture, with lessons learned from its own experience and from best practices across the country, SIRTI must set its focus even more sharply on Technology Led Economic Development in service to the technology business community of Eastern Washington.

The present mission statement for SIRTI is:

*“SIRTI is a Washington State-funded economic development agency. **Our mission is to accelerate the development and growth of technology companies in the Inland Northwest, especially in Eastern Washington.** Our target clients are innovative technology companies with defensible intellectual property, large market potential, and principals who show a strong desire to grow their business.”*

SIRTI has never conducted nor funded pure academic research of its own nor for the companies it serves. Instead, SIRTI's successes have stemmed from making connections or matches between industry, government and academic objectives. SIRTI, in partnership with the SIRTI Foundation, will focus upon a few key areas, hone its core competencies and achieve measurable success in those areas to be positioned well for future growth. SIRTI's goal will be leveraging the State's investment through results and attracting additional dollars to the region.

4. SIRTI Vision

Aligning expectations and resources

One Year:

The near term for SIRTI will be a time of transition. The purpose behind the transition will be principally to organize SIRTI resources and systems to better reflect the characteristics of the client companies SIRTI serves. In addition, SIRTI will renew its efforts to develop a deep network of partners in the business, academic and government arenas to assure that it is a sought after collaborator/catalyst in efforts to benefit the economic vitality of the Inland Northwest. Finally, with new appointments, the SIRTI board will reflect the technology business community it serves.

Two Years:

SIRTI reports initial results against metrics developed in collaboration with its stakeholders. Efforts to advance our ability to assist the dual business lines of *start-up* and *high growth* technology companies are in full gear. Building upon nearly 12 years of performance, the initial results are promising and position SIRTI well to attract additional State and Federal funding consistent with the economic goals of the Inland Northwest. SIRTI's relationship with the region's research institutions is rich with collaborations which have the potential to lead to highly successful spin-out companies.

Five Years:

SIRTI is the 'go-to' organization for the acceleration of business objectives for both start-up and high growth potential technology companies. SIRTI accomplishes results through a combination of quality hands-on services, close working relationships with the region's research institutions, and a developed network of private service providers. The mature network of partnerships maintained by SIRTI as well as the experienced, high energy staff make SIRTI the provider of choice for both incubation and accelerator commercialization services.

5. SIRTI Core Purpose

Why should there be a SIRTI, anyway?

One of the most compelling sections of the Joint Boards Strategic Retreat held August 25, 2005, was a roundtable discussion of the fundamental purpose of SIRTI and what motivates Board members to volunteer their time.

All spoke passionately about making meaningful contributions to their community. In general, the statements converged around working deliberately with the factors associated with the conversion from a resource-based economy to a knowledge-based economy centered around the unique place-based attributes of the Inland Northwest. Keeping the best and the brightest closer to home as well as providing a vibrant, diverse economy which supports jobs for everyone who wishes to enjoy the substantial lifestyle benefits of the Inland Northwest were mentioned as fundamental to the purpose. An organization whose contributions deliver obvious value and returns to the State is clearly included in this shared perspective.

The impetus behind SIRTI has really never been about a building or a set of bricks and mortar, and hence, these tangible assets will not become the central focus of SIRTI in the future.

SIRTI's Enduring Core Purpose: A catalyst for success of technology entrepreneurs of the Inland Northwest

SIRTI's aspiration to be an effective economic development catalyst stems from the dictionary definition of the word:

catalyst (noun): *stimulus to change; somebody or something that makes a change happen or brings about an event*

SIRTI does not take nor deserve credit for the individual companies' successes or the commercialization of university-developed research. Success as a catalyst means that SIRTI must be an exceptionally good team-player.

SIRTI's Core Values:

This is a deliverable to be more fully developed with SIRTI's staff and stakeholders, but the list will most assuredly include concepts of:

- Customer commitment
- Accountability
- Integrity

6. Key Strategic Challenges for SIRTI

Five areas of focus agreed to during the strategic retreat

6.1 Sharpening the vision and mission of SIRTI and the SIRTI Foundation

While the original legislation creating SIRTI specifically discussed a role in undertaking and funding research, the overwhelming consensus of the boards now was that the appropriate role for SIRTI is to focus on **companies** as engines of research commercialization, job creation, and associated economic impacts.

There was discussion of the question whether SIRTI should focus solely on the development and growth of existing companies, or whether its activities should also include support for new company creation. The consensus was that for SIRTI to be active in new company creation would require the commitment of a high level of additional resources. It was also noted however, that SIRTI should play an active role in developing a pipeline of emerging companies within the region.

In order for SIRTI to make a meaningful contribution to the creation of jobs in the region, given currently available SIRTI resources, it was agreed that SIRTI's primary focus should lie with existing companies in the start-up to high-growth stage of the business cycle. This affirms the current mission statement in that there is no mention of the "creation of companies":

Our mission is to accelerate the development and growth of technology companies in the Inland Northwest, especially in Eastern Washington.

6.2 Aligning SIRTI's financial and human resources with the mission

There was a very strong consensus that the financial and human resources of SIRTI need to be much more closely aligned with its mission. Said another way, SIRTI should be designed to be reflective of the client companies it is to serve. SIRTI faces the operational dilemma that in order to be successful, SIRTI must actually behave differently than it is organized. The demand is for a much more entrepreneurial culture.

Examining practices in other states, board members also discussed the most appropriate structure to be able to attract and manage these resources most effectively. It was noted that in other locations, state-funded organizations such as SIRTI are often structured as IRC 501.c.3 entities, which enables them (among other things) to:

- ◆ Be the recipient of grants and other funds which leverage the state's investment
- ◆ Operate in an effective manner with regard to working with private sector companies, especially in relation to management of confidential and commercially-sensitive information

- ◆ Implement appropriate performance management and staff incentive programs
- ◆ Eliminate ethical concerns about holding equity in client companies

In the discussion, it was also noted that the Foundation is already established as an IRC 501.c.3 entity, and that, as such, could be utilized as a vehicle for SIRTI to achieve these kinds of objectives. These issues clearly would need to be researched, explored and vetted with the legislature and the Governor's office.

Regardless of SIRTI's legal structure, it is very clear that the organization should be shaped to perform much more like the successful, young, entrepreneurial businesses SIRTI is created to serve. Additionally, since a significant legal restructuring is not likely to take place in the near term, the SIRTI organization will work to overcome the challenges without pursuing the restructuring in the near term. The following table will help contrast the characteristics found in an entrepreneurial private company vs. a public or governmental agency.

Table 1: Behaviors of Public and Private Organizations

Private/Entrepreneurial	Public/ Government
Empowerment focused	Compliance focused
Create value through innovation	Methodical, predictable, repetitive
Don't sweat the small stuff	Process over outcomes
Freedom to grow and fail	Focus on the rules
Personal responsibility	Entitlement concerns
Sense of urgency	Sense of good intentions
Save what you can	Spend what you have

As SIRTI and its boards work to hone SIRTI's focus, it is logical that the available resources be trained upon the assets of the economic region (the Inland Northwest), which SIRTI is designed to serve. The following sectors represent the intellectual property backbone and are the leading and emerging sectors in the Inland Northwest:

- ◆ Bioproducts/ Health Sciences
- ◆ Energy & the Environment
- ◆ Value-added Agriculture
- ◆ Defense/Homeland Security

Finally, as seen in the section on Governance, SIRTI will work with the Governor's office and other stakeholders to transform the characteristics of the Board to retain diversity of perspective, but to also reflect the experiences of the companies SIRTI is designed to serve.

6.3 Ensuring the sustainable success of the SIRTI Technology Center (STC)

The locally and federally funded STC will come on stream in December of this year. Extensive activity is under way to attract and secure appropriate tenants. There was a strong desire among the participants to ensure that the type of tenants selected, and the activities taking place within the STC, are closely aligned with the mission of SIRTI.

As the STC is a substantial asset for SIRTI, the community and the State, SIRTI will be keenly focused upon developing the facility and the services offered to clients of the facility to be best in class. In the meanwhile, SIRTI must:

- Deliver the building to operation on time and on budget
- Provide flexible interior design to fit the needs of the clients
- Continue to pursue high impact marketing and outreach
- Implement and instill the best practices as defined by the NBIA (National Business Incubator Association).

6.4 Creating strong strategic partnerships

During the retreat, there was a high degree of consensus among the meeting participants that establishing and successfully managing strategic partnerships will be critical to the success of SIRTI. Achieving these objectives will require clear identification and mapping of the different roles and activities of current and potential partners. It was also noted that the operation of successful partnerships will rely heavily on successful communications, which are clearly linked to SIRTI's objectives concerning higher levels of accountability.

It is imperative that SIRTI eliminate any confusion about its roles and correct any misinformation about its achievements in its marketplace. Key parts of our response must include consistent performance and reporting against a set of metrics upon which SIRTI's stakeholders agree.

As participants of all varieties in the private sector have been identified as the 'customers' of SIRTI, considerable emphasis will be given to maintaining strong relationships in the business community as well as establishing and maintaining a strong feedback loop.

A closely aligned partner of SIRTI will continue to be The Washington Technology Center (WTC). With its statewide mission, SIRTI performs a critical role in extending WTC's reach to Eastern Washington especially for programs like the Research and Technology Development (RTD) grant program administered by WTC and the provision of coaching services to companies navigating through the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) process to access federal grants.

6.5 External and internal accountability

Completing its 10th year of operation, SIRTI is just now seeing substantial follow-on financing activity among its former clients and DARPA grant recipients. To date, that composite number exceeds **\$130 million**. Indeed, of the original 35 DARPA award recipients, 23 companies are still going strong. This is an impressive track record, given the volatility of the technology sector for much of the past decade.

Recent intensive efforts by staff to tabulate statistics on SIRTI clients are shifting to the second phase in which additional data will be tabulated for the period 1996-present. See Section 13 for the performance measures. It is anticipated that this data gathering effort will take some time but will additionally serve as a vehicle to re-establish relationships between SIRTI and its client companies. In addition to these primarily external measures, the SIRTI staff will be developing a set of internal accountability measures. A measure of customer satisfaction will be developed to serve the purposes of both internal and external measurement. SIRTI must be measured by outcomes.

Though not required due to the size and scope of its resources, SIRTI will follow the tenets of the Governor's GMAP (Government Management Accountability and Performance) initiative. The System includes:

- ◆ Disciplined strategic planning, based upon citizen priorities and client requirements
- ◆ Systematic measurement and analysis of performance
- ◆ Alignment of employee work with agency goals
- ◆ Development of professional management
- ◆ Continuous improvement of work processes, based upon clear assessment of risk and strategic assessment

7. Environmental Analysis

What SIRTI Faces

7.1 Economic conditions of the Inland Northwest

While the decades of the 1960-1980 largely rewarded the natural resource based economy of Eastern Washington, subsequent decades have not. Since 1980 nearly every single Eastern Washington county, and all of its largest counties, have experienced a drop, sometimes dramatic, of per capita income levels relative the national average.

In 1969, three Eastern Washington counties showed higher than U.S. average per capita incomes; many were at the high 80th or 90th percentiles. By 2003, the most current year available for income statistics, not one was above the average mark. The highest ranking, Benton, was at the 94th percentile, while the two largest, Spokane and Yakima, were at 86th and 76th percentiles, respectively. This experience was not shared by the Central Puget Sound region, which was at the 122nd percentile. Its income, relative to the rest of the state, increased since 1969.

It is clear that the former legs of Eastern Washington's natural resource based economy are broken and will likely never be as strong as in the post World War II decades. Prices of agricultural goods have rebounded a bit from their lows of three or four years ago but forecasts from the USDA do not show significant price increases. A bright spot is the wine grape and wine industry, a good example of *value-added agriculture*. While showing phenomenal growth over the past 15 years, this industry cannot make up the decline of total revenues from the other large crops.

One also can not expect another mainstay of much of rural Washington, timber, to return to its heyday of the immediate post World War II period. Prices of timber have increased sharply over the past three years, but the industry faces an irrevocably reduced supply. Aluminum, the long-time key manufacturing industry in much of rural Washington, including Spokane County, is making a belated comeback. However, the job count is and will likely remain a far cry from former days.

Other, non-tech paths are promising but go only so far to make up lost economic activity. In Spokane County, health care currently dominates the local economy. However, many of the providers, especially hospitals, now find themselves in financial distress. A current bright spot is the finance industry, as Spokane is headquarters to several community and regional banks. In addition, the construction and real estate industries have boomed over the past two years.

The Tri Cities have benefited economically from the Hanford clean-up. However, this massive influx of Federal dollars will drop off steeply by the end of the decade. A sustaining element of that local economy comes from the massive presence of Pacific Northwest National Laboratory (PNNL). The Laboratory provides thousands of high-paying jobs and has an established record in technology transfer.

Tourism, especially wine tourism in Walla Walla & Yakima counties, is a growth industry. Tourism is growing in other scenic places in Eastern Washington. However, it is not an industry that generally pays higher-than-average wages. Distribution, logistics and wholesale activities are important and growing for Yakima and Spokane counties. It remains to be seen, however, whether the wage levels

will replace those once enjoyed in the manufacturing sector. Additionally, this sector may be adversely impacted by rising fuel costs.

A technology “curtain” exists between the two sides of the state, as technology firms and jobs are relatively scarce in Eastern Washington. The most recent data from the Washington Technology Center’s annual *Index of Innovation and Technology*, released spring of 2005, show a continued disparity in technology economic base between the central Puget Sound area and Eastern Washington. The Seattle area showed a tech employment rate of 86.5 per 1,000 jobs. The corresponding ratios for reported Eastern Washington MSA’s were: 4.7 in Ellensburg, 6.5 in Yakima, 25.6 in Pullman and 30.4 in Spokane. The one region that nearly matched the Seattle area’s result was the Tri Cities, with the tech job concentration of 85 per 1,000 jobs.

A key constraint to the development of a technology-rich economy in Eastern Washington is the relatively slow rate of tech firm creation. The 2005 WTC Index reveals that births of high tech firms in the Seattle area are at a much higher percentage of all firms than in the rest of the state, especially in Eastern Washington. The rate in the Tri Cities, relative to Seattle, was approximately half. The birth rate in the Spokane area was approximately at 40% of the Seattle rate. And the birth rate of tech firms in Yakima was less than 25% of the Seattle rate.

Clearly, many reasons underlie these results. The paucity of regional angel networks, so critical to the early years of a tech firm, in Eastern Washington, certainly plays a role.

A bright spot is the trend of higher activity of Eastern Washington’s research centers. As tallied by the National Science Foundation’s annual survey of extramural funded research, Washington State University’s most recent fiscal year revealed a total of \$175 million. This represents a 67% increase since 2000. University of Idaho won over \$85 million in 2004, an increase of 39% since 2000. Eastern Washington University took in nearly \$2 million by the same measure. Consider, too, the annual budget of Pacific Northwest National Laboratory: over \$635 million. While this large sum includes many non-research activities, R&D expenditures dominate.

7.2 SIRTI’s Opportunities

SIRTI enjoys several opportunities in technology. Research and commercial expertise, at national if not international levels, exists in the Inland Northwest in several domains. These are:

- ◆ Bioproducts/health sciences
- ◆ Energy & the environment
- ◆ Value-added agriculture
- ◆ Defense/homeland security

Bioproducts/Health Sciences

As land-grant institutions, both WSU and the U of I can point to a long tradition of research in biology and genetics. While much of that research has traditionally occurred in plant breeding, human biology has increasingly come to the fore. Recently, the NIH has become the largest funding agency at WSU. The two universities boast the largest assembly of mammalian reproductive biologists in North

American in a unique program, The Center for Reproductive Biology. Cancer research takes place in several departments at WSU. The WSU Veterinary School has attracted world-class researchers in sleep. The U of I has won several large NIH grants in the field of virology. PNNL spends an increasing sum on molecular biology, as evidenced by the Laboratory's establishment of the Environmental Molecular Sciences Laboratory (EMSL). With its ability to bring together biologists, chemists, geneticists, computer scientists, EMSL has embraced systems biology and now addresses the complex questions of proteomics (the study of the full set of proteins encoded by a genome).

Commercially, the Inland Northwest is home to the oldest biomanufacturing company in the state, Hollister Stier Laboratories, LLC. Several small biomedical firms are located in the region, ranging from device manufacturers to genetics diagnostics to specialized instrument providers. SIRTI has associations with many of the established firms and start-ups operating in this space.

Health care is the largest industry in the Spokane area. As the tertiary care center for a large geographical area, Spokane has developed a national reputation in cardiology and is also well-known in neurology, rehabilitative medicine and nephrology. The largest medical reference laboratory in the Pacific Northwest, Pathology Associates Medical Laboratory, is also resident in Spokane.

Significantly, the Spokane medical sector has built up a national reputation for the breadth and sophistication of its information management system. As a result, all five of Spokane County's largest hospitals have consistently been named to the "Top 100 Wired" Hospitals in the U.S. The hospital unit in charge of this effort, Inland Northwest Services (INHS) now runs an electronic medical record system of over 2.4 million uniquely identified patients. The system stretches from southern Idaho to Western Washington and is continually adding new hospitals.

A Coeur d'Alene-based medical group, Nighthawk Radiology, recently attracted over \$20 million in venture capital to grow its continent-straddling practice of reading films overnight. Another group operates a very large radiology network and has served as the beta site for web-enabled radiology products.

SIRTI has already worked with several medical start-ups with technology in the domains mentioned above. Perhaps the area with the greatest potential comes from the health IT sector.

Energy and the Environment

The Inland Northwest has a broad claim to excellence in several areas of energy technologies. PNNL is funded by the Department of Energy and has traditionally spent the bulk of its resources in this area. Recently, it has established, in conjunction with WSU, a Center for Bioproducts and Bioenergy in the Tri Cities. The Laboratory has developed several clean energy technologies, including biomass and microchannels for greater heat transfer and fuel cells. PNNL and WSU both have ongoing programs of national distinction in electricity transmission engineering.

Commercially, the largest technology company in the region, Schweitzer Engineering Laboratories, in Pullman, which grew from research conducted at WSU, develops market dominating products for electricity transmission. It operates globally. At least three fuel cell companies exist between Spokane and Richland. Spokane's largest technology company, Itron, specializes in electricity distribution planning and remote reading of energy consumption. It too, is increasingly a global company.

SIRTI has worked with all the fuel cell companies in the region and our incubator currently houses a spin-off from Itron. As new technologies emerge from WSU and other universities, SIRTI's experience in mentoring and incubating energy companies should serve it well.

Value-added Agriculture

Traditionally, SIRTI has spent only a little of its resources in agriculture. Yet, much of the patent portfolio at WSU lies in this field and WSU has been extremely successful in transferring its technologies to benefit this industry, albeit not always through the patent protection and limited commercialization process. Increasingly, technology is embedded in the agriculture practiced in the Inland Northwest.

The challenge and opportunity for SIRTI is to locate technology from which companies can be created, not merely licensed to out-of-state agribusiness concerns. At the moment, the Inland Northwest is not home to a significant number of "ag tech" firms.

Homeland Security/Defense

This broad area is one in which PNNL is a national player. WSU enjoys support on numerous projects supported by funds from the Department of Defense. The most prominent center of activities concerns shock physics. The university recently was named to a Federally funded consortium to monitor and upgrade the defense of the U.S. electricity grid. The U of I is a national leader in microchip design for satellite communications. EWU has focused its highly-rated computer science program on cyber security and the University of Idaho has an established center in the field.

Commercially, several Inland Northwest companies operate in this space. These include Commtech AHA, a SIRTI alumnus specializing in satellite chip design; GenPrime, another SIRTI alumnus specializing in the detection of bacteria; and a software company, NextIT. PNNL has recently spun out several technologies, ranging from software that recognizes subtle patterns in complex data to detection systems of closed containers, to next generation body scanners.

As noted above, SIRTI has considerable experience with defense technology firms. The technology of one of our two, current lead commercialization clients rests in the defense/homeland security area.

8. Lines of Business

The first step in focusing limited resources

8.1 Lessons from SIRTI's First Decade

SIRTI has been quite successful in attracting Federal dollars. Yet, commercialization efforts under the former DARPA operating framework but without DARPA funds have been less than successful. It is incumbent upon SIRTI at this juncture to capitalize on its successes and strengths, while confronting its weaknesses. At this stage in its history, SIRTI faces certain barriers to attracting client companies. These range from policies which SIRTI has put in place concerning charging for services rendered, to bandwidth associated with a lean staff and to the absence of any grant funds which traditionally have served as an attractor of the best ideas. SIRTI must make practical choices across the two dimensions of available resources and available bandwidth (i.e., technical or industry-specific capability). Both of these dimensions can be and are supplemented by partnerships SIRTI has or can further develop.

In addition, it is clear that the successes of SIRTI alumni have been noticeable only after a several years. Most of these companies came to SIRTI with little more than an idea, in the presence of inventors with little to no business experience and very scarce financial resources. They were either the products of university technology transfer or individual private efforts. In this regard, SIRTI's experience fits the long and non-linear curve of growth noted by scholars of this type of technology based economic development.

Pure technology transfer is very staff intensive, requires intimate knowledge of the market and the proprietary details of the subject intellectual property (IP), has a very long development cycle, as noted, and faces highly volatile success rates. With its present resource allocation, SIRTI is not well positioned to drive success via a focus on pure technology transfer. Therefore, this purpose can be fulfilled through partnerships with the research universities, private for profit providers, and SIRTI extending the reach of the Washington Technology Center (WTC) programs such as the Research & Technology Development (RTD) grants program.

In addition, SIRTI will address this sector, somewhat as it does now, in a highly opportunistic fashion. SIRTI will work closely with the NIOSH/CDC (National Institute of Occupational Safety and Health/Centers for Disease Control) to achieve commercialization of the most promising opportunities and to do so will incorporate, skills, talents and manpower from SIRTI's network of partners. Further, SIRTI continues to develop a much closer working relationship with the WSU Research Foundation (WSURF) and plans to continue this work as requested by WSURF.

To execute upon the renewed focus upon serving **companies**, SIRTI will be organized around two distinct, but complementary lines of business: **Start-up Business Services LOB** and **High Growth Business Services LOB**. This arrangement is designed to exploit both SIRTI's physical assets, the incubators, and its commitment to accelerating job growth in the Inland Northwest. Incubator/Accelerator services are primarily targeted at start-up companies for which a critical success

factor includes laboratory, office, or flex space in which to develop the product or service. High Growth Business services are targeted at small to medium and sometimes medium-large companies where the business is performing at a plateau and wants to accelerate growth.

SIRTI will be working under a service delivery model which is designed to create opportunity for self-sufficiency, not dependence. The SIRTI management team has developed a comprehensive matrix of services, which can be provided or facilitated by SIRTI in service to the businesses that become SIRTI clients.

Both of these lines of business may engage SIRTI's two sets of core competencies: commercialization services and augmented incubator services, here labeled *accelerator* services. We define accelerator services as a version of traditional technology incubation, augmented by a full set of services addressing much more than the physical needs of a firm. Before a discussion of how firms of different size and maturity receive SIRTI assistance, it is useful to review these two core competencies. By necessity, this discussion is brief: a full version of how these activities occur can be found in SIRTI's Operational Plan. Please refer to **Appendix A** for a complete list of the companies served by SIRTI in its life to date.

8.2 Commercialization Services

SIRTI builds its "lead stream" of potential commercialization clients from many sources, both direct and indirect. However, our most important source is referral from partner organizations. Partner organizations have far greater "reach" within the region and community that SIRTI can have with solely its own resources. We spend a significant amount of time and energy maintaining partner relationships and educating our partner organizations about who we are and what we do. We also directly and indirectly support their activities so as to build and maintain a positive and mutually beneficial working relationship.

Consistent with its role as an economic development agency, SIRTI seeks to find technology based opportunities to grow companies that will have a meaningful impact on the economy of the Inland Northwest. We attempt to assist as many companies as possible with the resources we have; however, we also prioritize opportunities based on our professional judgment and assign greater or lesser resources based on expected business outcomes.

At the conclusion of "due diligence" a SIRTI team applies the following criteria for the "ideal" client (we recognize few, if any, candidates will possess all these characteristics):

- ◆ Strong management and significant executive commitment
- ◆ Large, attractive markets
- ◆ Unique technology that can create a competitive advantage
- ◆ Realistic business and financial plan

On an ongoing basis, SIRTI continues to apply these criteria to our existing client portfolio and actively manage our mix of clients. Client needs are not constant – they evolve greatly over time and tend to be very periodic, with times of intense bursts of need for assistance interspersed with longer

periods of monitoring. Development of early-stage technology based companies into stable business entities frequently takes many years – five, seven or ten years are not uncommon. SIRTI's support over that entire time period as coach, advisor and assistant is critical to a client company that encounters various struggles and challenges to achieve and sustain growth.

8.3 Accelerator Services

Client selection and graduation are critical to a successful accelerator program at SIRTI and the SIRTI Technology Center (STC). The role of client selection and graduation is to:

- Promote outcomes resulting from SIRTI's mission to grow and develop technology companies
- Ensure maximum return on investment of the incubator's valuable, limited resources
- Avoid a misfit between clients and incubator capabilities
- Make room for a continuing flow of incubator clients

The following discussion applies to both the current SIRTI facility and the STC.

Client Selection Guidelines

A few of the key characteristics of the SIRTI Incubator selection process are:

- The applicant should be early-stage - generally within the first two years of business operations – not yet profitable and still growing.
- Applications must show the ability to pay rents and fees charged by the STC incubator/accelerator facility while developing positive cash flow.
- Applicants should present a management team (or plan) that is capable of handling the technical aspects of the business or understand how to obtain the needed technical assistance.
- Applicants should present a management team (or plan) that is capable of handling the operational and marketing aspects of the business or understand how to obtain needed assistance.
- The business must be developing a technology based product or service that will further the economic objectives of the region.

The Operational Plan contains the full check list, as well as a detailed matrix which illustrates how the full gamut services is provided by SIRTI or its partners.

Client Graduation Guidelines

The accelerator program will soon establish graduation policies that include specific criteria relative to the incubator's mission and its ability to provide continued value to the client. These new policies will be included in all new leases and materials supplied to serious applicants, and SIRTI management will ensure applicants understand and accept them. Sample criteria will include:

Time limits – Accelerator services will establish a maximum amount of time for which a client can receive services. The goal is to get STC clients into the private sector as quickly as possible. We envision this as typically a three to five year period, but will likely be set on a case by case basis.

Resource Commitments – The SIRTI management will establish limits on the resources it commits to any one client. This may be designated in terms of hours of assistance or rentable square feet occupied or both.

Value – SIRTI will make a self-assessment of its ability to provide continuing value to the client. Clients who have progressed beyond the STC incubator/accelerator's capacity to provide sufficient value should graduate and begin utilizing private sector providers.

Rent Guidelines

The current rent structure provides for increasing rents each year but not to the extent of controlling the client graduation motive. This policy will be reviewed soon and a more aggressive policy will be put in place for new clients. The new rent policy will highly encourage clients to leave the incubator as they near their target graduation date as an accelerator client.

Over time, the rents on the existing SIRTI building will need to be brought into line with the higher rents being sought in the new STC building.

8.4 Guiding Principles to Start-up Business Assistance

The key to early business start-up graduation from accelerator facilities is the quality of the programs/assistance delivered to the client company. SIRTI and the SIRTI Technology Center (STC) will be offering a number of services to assure successful graduation from the program.

The first step is an admittance application process to determine the stage/needs of an applicant and the probability that SIRTI can help the client company achieve high growth within a 3-5 year time frame. This process is also intended to identify any special needs of the client if they are admitted to the program.

The client is made aware of the graduation policy up front and that the goal of SIRTI's assistance program is to help them graduate sooner than the mandatory guidelines. While in the accelerator program, a number of services are made available to the client company.

- ◆ Flexible leasing terms and expandable space options to encourage efficient growth while in the program.
- ◆ Best of class amenities like high-speed internet, phones, reception, copying, IT support, conference/meeting rooms
- ◆ While in the facilities, client companies may have access to a “shadow advisory Board of Directors” to help guide the start-up until a real board can be assembled.
- ◆ A mentoring program will also be made available to provide management assistance to the CEO of start-up client companies.
- ◆ SIRTI will supply its skills *and* partnership relationships to assist with tasks like: strategic planning, business plan writing, marketing plans, technology assessment, financing assistance (in all its various forms), as well as legal, human resources, accounting and technical outsourcing referral assistance.

8.5 Guiding Principles of Assistance to High Growth Businesses

Target clients here are technology based companies that have either reached a plateau in their growth or are not achieving sustainable economic results. These companies otherwise fit the model of high-growth potential. As early stage companies enter an ongoing operating role, new challenges arise in sustaining profitable growth in areas such as manufacturing operations, marketing, financial management and operational efficiency.

SIRTI's role is to assist these companies in identifying opportunities for break-out strategies that maximize their potential economic impact in the region. In addition to providing assessment and performance review services, SIRTI will assist in bringing together the assets of the community, including for-profit service providers, to deliver solutions to these clients. SIRTI will focus on providing assistance where targeted resources can have maximum impact and leverage our resources whenever possible with our network of contacts and relationships.

A unique asset for these companies will be the SIRTI *Technology Growth Fund*, a revolving loan facility targeted specifically at these types of clients who frequently find themselves capital constrained in their early growth. The operation of this fund will provide both access to potential clients in need of assistance and a tool not otherwise typically available to low net-worth and credit risky clients, to address transitional capital requirements.

9. Relationships

Success depends upon healthy partnerships.

SIRTI offers several, but not all the necessary, types of services to emerging technology companies. Several institutions and specialized organizations in the Inland Northwest populate the continuum of assistance types to these firms. Table 2 presents SIRTI's view of this continuum and of the important functions offered by the various groups.

Table 2: A Matrix of Services Offered Inland NW Technology Firms – by Selected Inland NW Providers⁽¹⁾ (Draft for Discussion Purposes)

Company type Services Offered	Tech Transfer⁽³⁾	Start-up	Semi-Mature	High Growth
Secure Financing	PNNL, SIRTI (debt), Connect NW (VC)	Connect NW(VC) SIRTI (debt)	Connect NW (VC) SIRTI (debt)	Connect NW (VC) SIRTI (debt)
Obtain Grants	PNNL, WSURF, SIRTI, WTC ⁽²⁾	SIRTI, WTC	WTC, SIRTI	WTC, SIRTI
Prepare for Financing	PNNL, SIRTI	Connect NW SIRTI	Connect NW SIRTI	Connect NW SIRTI
Biz Plan Evaluation & Development	PNNL, SIRTI	SIRTI	Connect NW SIRTI	SIRTI
Market Assessment	WSURF, PNNL, SIRTI	SIRTI, WSURF	SIRTI	SIRTI
Technology Assessment	WSURF, PNNL, SIRTI	SIRTI, PNNL	SIRTI, PNNL	SIRTI
Prospect Identification	WSURF, PNNL	SIRTI	Connect NW SIRTI	SIRTI, Connect NW
Targeted R&D	WSURF, PNNL			

1. This matrix is only intended to provide illustration of some of SIRTI's most closely associated partners in providing assistance to growing technology companies in eastern Washington. It is not intended to be the definitive illustration, but instead it is intended to provide insight from SIRTI's point of view concerning current working relationships between and among partners.

2. The Washington Technology Center (WTC) does not explicitly appear outside of the "Obtain Grants" function in this chart, due to the primary focus of this document upon Eastern Washington.

The WTC is clearly active in commercialization and fostering job growth throughout the state and could be listed in nearly every section.

3. It should be noted that in the field of Technology Transfer, WSU and PNNL are focused almost exclusively on their own technologies while SIRTI provides service to technologies supplied by multiple sources.

Table 2 Definitions: *Tech Transfer* refers to the movement of intellectual property to a commercial setting. The commercial outcome might be a start-up company; however, it could also be a license. Typically, this process starts with an innovation by a faculty member or staff scientist.

Start-up here refers to the same movement of intellectual property, but from entrepreneurs outside academia or a national laboratory. It will typically have sales but these are insufficient to push the firm beyond a positive cash flow or profit break even point.

A *Semi-Mature* company is one that has grown beyond the prototyping stage and has actual sales of product. Typically, it will be a small technology firm that still faces obstacles in further growth.

A *High Growth* firm is one that, on the basis of its technology, should experience a sales growth rate of at least 25%/year over a period of at least three years. Typically, the risk that these firms face is managing their growth rate.

SIRTI maintains relationships with four categories of stakeholders: regional higher educational institutions, the regional business community, technology associations and public policy leaders, both State and Federal. Nearly all regional colleges and universities contribute, in some form, to the ongoing activities of SIRTI. However, by virtue of size and proximity, WSU, in particular its Research Foundation, holds the most collaborative promise for SIRTI. Due to their board participation and to our need of connecting companies to a broader audience, many members of the Spokane area business community and technology groups come into contact with SIRTI on a regular basis. The two with which we have or will have most frequent contact are Connect Northwest and the Northwest Business Development Association.

Finally, SIRTI maintains dialog with many elected officials. First and foremost, we strive to inform our state executive and legislative leaders and their staff about SIRTI activities. Second, we have worked with the Federal delegation from Eastern Washington, as the Federal government has been a significant source of funds. We also brief and collaborate with Spokane area local elected officials over issues such as the University District.

Appendix B contains detail about these relationships. The narrative and accompanying table demonstrate the scale of SIRTI's collaboration and presents them in an ordered fashion.

10. Alumni

Manifestations of SIRTI's Success

10.1 Current Status

Thirty-five companies received DARPA funds from SIRTI between 1996-2001. Of that number, 23 are still in existence. Some are flourishing, some merely hanging on; for the majority, their current status lies in between. These 23 SIRTI alumni have now attracted over \$130 million in add-on investments – from angel and venture sources as well as from additional Federal grants over the past eight years. The trend has accelerated sharply over the past three years.

Further metrics on the success of these companies are not yet available. Section 13 takes up these metrics. Alumni offer the best measurement of SIRTI outcomes, since they are more established relative to companies currently in the business assistance pipeline. More established companies are the ones to make sales, attract add-on investment, and ultimately increase their workforce. In addition, some case studies of SIRTI alumni should be reported shortly in an upcoming monograph from EWU's Institute for Public Policy & Economic Analysis. These should shed light on the obstacles and opportunities faced by emerging technology firms in the Inland Northwest.

No analysis of the total economic impacts of these investments or of the growth of SIRTI alumni has been undertaken to-date. Such studies are usually done via input-output models. However, it is likely that the impacts of these technology companies, relatively to similar-sized, non-technology firms, will be large, given the salaries paid.

11. Funding

SIRTI is in the business of leveraging resources to the maximum extent

The final operational plan will detail tactics designed to position SIRTI together with some of its key partners to win federal funding for the dual purposes of accomplishing national objectives and stimulating the economy of the Inland Northwest.

Fortunately, SIRTI has a successful track record in attracting federal dollars to the region, starting with the \$15 million in DARPA funding at inception and continuing through the Economic Development Administration awards totaling \$4.5 million and a Department of Defense appropriation of \$0.2 million. While this is an excellent contribution to the mission, it is noted that success in winning grants tends to be 'lumpy' in that an organization can go for years without success.

In the category of good stewardship: SIRTI must practice the disciplines, which it teaches its client companies.

12. Governance

The Board of SIRTI must also reflect the characteristics of client companies

SIRTI's future depends on strong, active, and supportive Boards at both the Foundation and SIRTI. A review of the Vision, Mission, and Operation of SIRTI should also lead to a review of the current composition and activities of those two Boards to ensure all resources are aligned appropriately and that SIRTI continues to benefit from Boards which offer a diversity of perspective to the governance process.

Boards exist in part to help hold entities accountable. But, equally important, they are also assets and excellent resources for the success of any entity. They help govern, help remove barriers, help create policies that ensure the success, and generally help advise and guide executive management on high-level, often external and community-related issues.

The future Board structure of SIRTI should be

- ✓ Majority from technology-based businesses ("Customers")
- ✓ Key representation from partners/intellectual resources (universities, PNNL, etc.)
- ✓ Key representation from stakeholders (state, region, other entities)
- ✓ Strategic representation outside the state (Idaho, Oregon, Montana, Washington, DC for federal funding, expertise from other SIRTI-like organizations across the country)
- ✓ Broader regional reach
- ✓ Executive level

13. Performance Measures

SIRTI's report card

As noted throughout this document, SIRTI considers metrics of its activities essential for both internal and external assessments of our progress. The following 11 indicators have emerged from staff and boards discussions. The majority are outcome-based. Additionally, the list encompasses the four metrics submitted to the OFM in August, 2004 and which OFM currently uses to track progress of SIRTI. Factors like jobs, payroll and sales will additionally be measured in aggregate growth rates.

SIRTI Clients

- ◆ Survivability rate
- ◆ Add-on investment
- ◆ Payroll created
- ◆ Jobs created
- ◆ Approximate sales growth
- ◆ Intellectual property secured
- ◆ Companies served by commercialization & incubator services
- ◆ Occupancy rate of incubator (measured by square ft.)

Management

- ◆ Amount of non-state dollars won or attracted
- ◆ Client/Customer/Partner Satisfaction
- ◆ Average tenure of tenants

Appendix A:

History of SIRTI Clients - by Type of Service



Appendix A: History of Clients Served by SIRTI

<u>Date of 1st Contact</u>	<u>Multi-Year</u>	<u>Firm</u>	<u>Location</u>	<u>Incubator Client</u>	<u>Commercialization Client</u>	<u>DARPA Awardee</u>
1995	No	AgileLink	Spokane	Yes	No	Yes
1995	No	ART	Spokane	No	No	Yes
1995	Yes	ASAP	Spokane Valley	No	Yes (SBIR assistance)	Yes
1995	Yes	Avista Labs	Spokane	Yes	No	Yes
1995	Yes	DevTec	Pullman	No	No	Yes
1995	No	ISR	Pullman	No	No	Yes
1995	Yes	New Light Industries	Airway Heights	No	Yes (business advisory)	Yes
1995	No	Pathology Associates	Spokane	No	No	Yes
1995	No	Quantum Northwest	Airway Heights	No	No	Yes
1995	Yes	Test 21	Cheney	No	No	Yes
1995	Yes	WismerMartin	Spokane	No	No	Yes
1996	Yes	AHA	Pullman	No	No	Yes
1996	Yes	GenPrime	Spokane	Yes	Yes (business advisory)	Yes
1996	Yes	InnovaTek	Richland	No	No	Yes
1996	Yes	Manwaring Labs	Pullman	No	No	Yes
1997	Yes	AC&D/Chinook	Pullman	No	No	Yes

Date of 1st Contact	Multi- Year	Firm	Location	Incubator Client	Commercialization Client	DARPA Awardee
1997	Yes	Mesosystems	Richland	No	No	Yes
1998	No	Airex	Bellevue	No	No	Yes
1998	No	Argo	Spokane	No	No	Yes
1998	Yes	CWTP	Spokane	No	No	Yes
1998	Yes	CWTT	Richland	No	No	Yes
1998	Yes	HVI	Spokane	No	No	Yes
1998	Yes	Translation Tech Inc	Spokane/ Pullman	Yes	Yes (business advisory)	Yes
1998	Yes	Zess Engineering	Spokane	Yes	Yes (business advisory)	Yes
1999	Yes	Berkeley Instruments	Richland	No	Yes (SBIR assistance)	Yes
1999	Yes	Biomedex	Spokane	Yes	No	No
1999	No	Pacific Technologies	Spokane	No	No	Yes
1999	No	Screaming Mouse	Spokane	No	No	Yes
2000	No	SIGN	Kennewick	No	No	Yes
2000	No	Soil Search	Pasco	No	No	Yes
2000	Yes	Virion	Kennewick	No	No	Yes
2001	No	Aurora Consulting	Spokane	No	No	Yes
2001		Bio~Origyn	Valleyford	Yes	Yes (SBIR assistance)	Yes
2001	Yes	Roy-G-Biv	Bingen	No	Yes (business advisory)	Yes

Date of 1st Contact	Multi- Year	Firm	Location	Incubator Client	Commercialization Client	DARPA Awardee
2001	No	TriGeo	Coeur d'Alene	No	No	Yes
2002	No	Kinetically Int Systems	Spokane	No	Yes (SBIR assistance)	No
2002	Yes	Magnetic North	Spokane	No	Yes (business advisory)	No
2002	Yes	PCS Utilidata	Spokane	No	Yes	No
2002		Pearl Systems	Spokane	No	Yes (SBIR assistance)	No
2002	Yes	SmartPlugs	Sandpoint	No	Yes (SBIR and business advisory)	No
2002	No	Wavevisions	Snohomis h	No	Yes (due diligence only)	No
2003	Yes	ACW Solutions	Spokane	Yes	Yes (business advisory)	No
2003		Agilent Technologies	Liberty Lake	No	Yes (business advisory)	No
2003	No	American Drive Interaction	Spokane	No	Yes (due diligence only)	No
2003		Bob Prohaska	Spokane	No	Yes (due diligence only)	No
2003	Yes	Cascade Fitness	Moses Lake	No	Yes (due diligence only)	No
2003	Yes	ClinicView Systems	Spokane	No	Yes (business advisory)	No
2003	No	Columbia Phytotechnology	Pullman	No	Yes (SBIR; business advisory)	No

Date of 1st Contact	Multi- Year	Firm	Location	Incubator Client	Commercialization Client	DARPA Awardee
2003	No	Commuter Cars	Spokane	No	Yes (due diligence only)	No
2003	Yes	DAS Electronics	Colbert	Yes	Yes (business advisory)	No
2003	No	Doug Durham	Spokane	No	Yes (due diligence only)	No
2003	Yes	EWU (J. Small)	Cheney	No	Yes (tech transfer)	No
2003	No	GameEnergy	Spokane	No	Yes (due diligence only)	No
2003	Yes	Genesis Fueltech	Spokane Valley	No	Yes (grant assistance & multimedia)	No
2003	No	INHS	Spokane	No	Yes (business advisory)	No
2003	No	Iris Ventures	Spokane	No	Yes (due diligence only)	No
2003	No	Jeffrey Evans	Spokane	No	Yes (due diligence only)	No
2003	No	Jim Deehr	Spokane	No	Yes (due diligence only)	No
2003	Yes	Kim Goodman	Spokane	No	Yes (due diligence only)	No
2003	Yes	Magnetic North	Spokane	No	Yes (business advisory)	No
2003		Marasys Inc.	Hayden Lake	No	Yes (due diligence only)	No
2003	Yes	MatriCal	Spokane	Yes	No	No
2003	No	MicroFlat Systems	Spokane	No	Yes (grant assistance)	No
2003	No	Olympic Technologies	Wenatchee	No	Yes (due diligence only)	No
2003	No	Operation Pinecone	Spokane	No	Yes (due diligence only)	No
2003	Yes	Pacific NW Biotech	Pullman	No	Yes (business advisory)	No
2003	Yes	PortaCare (Tenold Brothers)	Spokane Valley	No	Yes (business advisory)	No
2003	Yes	RehabLogic Inc.	Spokane	Yes	Yes (business advisory)	No

Date of 1st Contact	Multi- Year	Firm	Location	Incubator Client	Commercialization Client	DARPA Awardee
2003	Yes	Riverpoint Pharmacy	Spokane	Yes	No	No
2003		Scafco	Colbert	No	Yes (financing assistance)	No
2003	Yes	Signature Genomic	Spokane	No	Yes (SBIR)	No
2003	No	SpeedEMenu, TYMYL Corp.	Spokane	No	Yes (due diligence only)	No
2003	No	Teveks	Addy	No	Yes (business advisory)	No
2003	Yes	Therapeutic Dimensions	Spokane	No	Yes (business advisory)	No
2003	No	WolfPac Group	Hayden Lake	No	Yes (business advisory)	No
2004	Yes	Aegis Biosciences	Spokane	Yes	No	No
2004	Yes	BioEnergy Systems	Spokane	No	Yes (due diligence only)	No
2004	Yes	CSK Communications	Spokane	Yes	No	No
2004	No	Dalton Archery	Nine Mile Falls	No	Yes (due diligence only)	No
2004	No	Diane Kamionka	Bellingham	No	Yes (business advisory)	No
2004	No	Evergreen Engine	Spokane	No	Yes (multimedia; business advisory)	No
2004	No	GamerzUnion	Spokane	No	Yes (business advisory)	No
2004	No	Howard Bray	Spokane	No	Yes (due diligence only)	No
2004	No	Kalispel Tribe	Cusick	No	Yes (grants assistance)	No

Date of 1st Contact	Multi- Year	Firm	Location	Incubator Client	Commercialization Client	DARPA Awardee
2004	Yes	Kim Goodman	Spokane	No	Yes (due diligence only)	No
2004	No	Moechine Solutions	Spokane	No	Yes (due diligence only)	No
2004	No	NW Product Designs	Spokane	No	Yes (business advisory)	No
2004	No	NWETC	Seattle	No	Yes (business advisory)	No
2004	No	PfN Technologies	Charlestow n	No	Yes (financing assistance; business advisory)	No
2004	Yes	Pondera Engineers	Spokane	Yes	Yes (multimedia)	No
2004	Yes	Portacare (Tenold Brothers)	Spokane Valley	No	Yes (business advisory)	No
2004	No	SB&E	Spokane	No	Yes (due diligence only)	No
2004	Yes	SmartPlugs	Sandpoint	No	Yes (financing assistance; business advisory)	No
2004	No	Tate Industries, Scott Shryock	Spokane	No	Yes (due diligence only)	No
2004	Yes	WSURF (BioPharming)	Pullman	No	Yes (due diligence only)	No
2004	Yes	WSURF (Data Obfuscation)	Pullman	No	Yes (due diligence only)	No
2005		Bakkura	Spokane	No	Yes (business advisory)	No
2005	Yes	BioEnergy Systems	Spokane	No	Yes (business advisory)	No
2005	Yes	CDC (R2P Review)	Spokane	No	Yes (tech transfer)	No

Date of 1st Contact	Multi- Year	Firm	Location	Incubator Client	Commercialization Client	DARPA Awardee
2005		CopyCat Solutions	Spokane	No	Yes (due diligence only)	No
2005		DAG (HomeMovie.com)	Spokane	No	Yes (due diligence only)	No
2005		Dave Bonner	Spokane	No	Yes (business advisory)	No
2005		DirectLink	Spokane	No	Yes (due diligence only)	No
2005		Director's Desk	Post Falls	No	Yes (business advisory)	No
2005		Douglas Harwood	Port Angeles	No	Yes (due diligence only)	No
2005		Emerge LLC	Spokane	No	Yes (business advisory)	No
2005		FarmGate Solutions	Spokane	No	Yes (business advisory)	No
2005		Hardco LLC	Yakima	No	Yes (SBIR)	No
2005		Innotek	Spokane	No	Yes (due diligence only)	No
2005		Jonathan Reynolds	Pullman	No	Yes (business advisory)	No
2005		Leon Breckenridge	Spokane	No	Yes (business advisory)	No
2005		Magiix	Post Falls	No	Yes (business advisory)	No
2005		Merlyn	Airway Heights	No	Yes (SBIR)	No
2005		NetSavers.biz	Spokane	No	Yes (business advisory)	No
2005		New Horizons Technology	Pasco	No	Yes (business advisory)	No
2005	Yes	WSURF (AgFrost Net)	Pullman	No	Yes (tech transfer; business "spin-out")	No
2005	Yes	WSURF (FRED)	Pullman	No	Yes (due diligence only)	No

Appendix B:

SIRTI Relationships and Partners Matrix



The intent of this section is to elaborate on some of the relationships and partnerships which SIRTI maintains throughout the region and the economic development community.

B.1 Academic Relationships

The board of SIRTI includes representatives from each of the Eastern Washington region colleges or universities. In addition, a representative of the University of Washington Medical School sits on the SIRTI board. These board members function as bridges between SIRTI staff and their university researchers. SIRTI has worked with faculty entrepreneurs from both Eastern Washington University and Washington State University.

The greatest opportunity to facilitate technology transfer lies with WSU. Recently, that institution's tech transfer office, the WSU Research Foundation (WSURF), and SIRTI commercialization staff have collaborated on assessing technology and markets of certain intellectual property in the WSURF portfolio. It is likely that this collaboration will serve as a model of future work between the two organizations. Future work from WSURF could also ask SIRTI to pursue opportunities around firm creation or licensing the IP to Washington state firms.

Neither EWU, Gonzaga University, Central Washington University nor Whitworth College supports a technology transfer office. With these two institutions, SIRTI will operate less formally and might fulfill some of the roles of such an office, if/when asked.

Since SIRTI's mission is currently restricted to Eastern Washington and since the UW does not have a research presence in the region, technology transfer opportunities for SIRTI have not yet appeared from that institution. Should the proposed UW Medical School expansion to Spokane bring with it researchers, SIRTI will seek opportunities. The UW enjoys, however, a strong technology transfer office, and a working relationship between it and SIRTI would need clarification.

Similarly, due to its status as an agency of the State of Washington, SIRTI has not dealt with technology transfer opportunities at the University of Idaho. However, the economies of Moscow-Pullman and Coeur d'Alene-Spokane are closely linked, so assistance given to university researchers in these Idaho communities may well lead to increased economic activity in Washington State, whether or not any resulting firm is located on the other side of the state line.

All universities contribute to SIRTI's mission outside of intellectual property development. First, SIRTI draws highly motivated interns from all the Spokane area institutions of higher education. Second, some SIRTI clients may be available to select business, engineering, or science school classes as "projects"; this is a model that enjoys a wide following nationally. Third, as the SIRTI advisory pool takes shape, many faculty, usually from their business or engineering schools, will be able to serve the program's goal of extending a small company's depth of talent.

B.2 The Business Community

SIRTI and the SIRTI Foundation have several members of the business community as board members. These can and have served as ears and eyes for collaboration potential between the private sector and SIRTI. Through its board members, SIRTI has gained incubator tenants and commercialization clients. A key task for SIRTI is to communicate with the private sector exactly what

the agency does and what it does not do. The clarity of mission and vision that this plan should provide will serve as a platform for this communication. Dialog with the private sector is further enhanced by SIRTI's maintaining a welcoming stance to the gamut of business and technology interest groups that are in need of meeting space. SIRTI has traditionally provided such space and can undoubtedly do more.

Maintaining a board composition that reflects the broad areas from which SIRTI will draw its clients is vital and taken up in Section.....Perhaps as important is the breadth and depth of the roster of private sector executives who will volunteer to serve, as referenced above. SIRTI anticipates having dozens of senior level business people available within a year to small companies to serve as mentors, on shadow boards of directors or as technical advisors. This is model that has worked successfully in many places. Given the civic pride and cooperative spirit evident in the region, we anticipate a high level of participation in this program.

B.3 Technology Groups and Associations

It is in the region and SIRTI's best interests to collaborate with as many like-minded groups as possible. Doing so extends the reach of both parties. Locally, this collaboration touches many groups, including the Spokane Regional Chamber of Commerce, the Spokane Area EDC, the Spokane Valley Chamber of Commerce, Connect Northwest, Technet, EFGN and AHANA.

The range of collaboration with these associations and groups extends from co-promotion of events and programs, to sharing of joint prospects, to the handing off of certain clients to an organization better suited for them, and to shared advocacy for certain projects with a component of public monies. In addition, the SIRTI building houses two state-funded agencies, the regional offices of the Small Business Development Center (SBDC) and the Washington Manufacturing Service (WMS). To-date, collaboration between SIRTI and these agencies has largely been one of referral or providing space for their activities. We are currently exploring further collaboration potential.

Regionally, SIRTI has not participated in groups or associations to the degree it has in the Spokane area. SIRTI does have ongoing relationships with the Economic Development Office of PNNL and the operator of APEL, the large technology incubator in Richland. These links could be strengthened and new ones forged with a select group of economic development organization in the Tri Cities. Some opportunities may also exist in the Wenatchee area, in particular with the Greater Wenatchee Area Technology Alliance (GWATA).

Statewide, SIRTI enjoys membership in several organizations, including the Washington Biotechnology & Biomedical Association, the WSA, the AeA and the Technology Alliance. SIRTI has endeavored to give these organizations a voice in the region via the pages of the SIRTI newsletter and by providing facilities for many of their Spokane area meetings. In turn, SIRTI staff have attended events and meetings of these statewide organizations.

Perhaps the most important relationship with these groups is the one with the Washington Technology Center (WTC). SIRTI acts to extend the reach of the WTC by promoting its activities in Eastern Washington, helping to locate possible recipients for the WTC's grant program, and by supporting the WTC campaign to raise awareness of SBIR/STTR programs in the state. The two organizations share reciprocal board seats.

B.4 Public Policy Representation

As a State agency with a mandate to help technology entrepreneurs, SIRTI has consistently worked to augment its budget, largely from Federal sources. Over the years, SIRTI has done this several times, beginning with the \$15 million DARPA grant in 1995 to the most recent \$4.46 million in grants from the U.S. Economic Development Administration (EDA). The EDA grants, too, have been matched by local dollars, all flowing toward SIRTI activities or projects. The sum of this Federal and local augmentation of SIRTI's operating budget has been nearly \$25 million in the first 11 years of SIRTI. We note, however, that these grants are usually large and "lumpy," i.e. occurring irregularly. We expect this pattern to continue.

As a State agency, SIRTI also desires to be held accountable to appropriate metrics. The majority of SIRTI staff have successful experience in the private sector where metrics such as sales and profitability were everyday concerns. A broader discussion of metrics is taken up in Section 14. SIRTI has participated in the prior administration's POG review from OFM, the 2004 JLARC review of all state agencies engaged in economic development, and is currently informing itself about the current administration's GMAP program.

SIRTI briefs the Spokane area Legislative delegation at least once annually, Legislative leadership at the same frequency and leadership in the higher education and economic development committees more frequently. We employ the services of a contract lobbyist to assist these endeavors. We have hosted many site visits by legislators, in committee or individually.

Federally, SIRTI pursues several objectives. One, mentioned above, is to assist regional firms attract SBIR/STTR grants. Eastern Washington is an underperformer in winning these grants and they can be of great help to fledgling companies. Several SIRTI alumni and incubator clients are serial winners of SBIR grants.

A constant for SIRTI is learning what Federal programs may offer opportunity. In the first decade of SIRTI's existence, most of these opportunities have been found in the Department of Defense. It is likely that more such opportunities are available from DoD. However, other agencies may provide appropriate projects. These include: the Department for Homeland Security, the Department of Energy and the Department of Agriculture. SIRTI will be mindful, however, of the resources required both to acquire these Federal grants and administer them.

In the past, SIRTI has worked with the Federal delegation representing Eastern Washington on a variety of projects and issues. We continue to do that, briefing especially local office staff about activities and plans.

Table 3 enumerates SIRTI's partnerships over a broad range of organizations. It is ordered by frequency and importance of the collaboration.

Table 3: Matrix of SIRTI's Partnerships:

PARTNER ROLE	PARTNER ORGANIZATION	PARTNER ACTIVITIES	SIRTI ACTIVITIES	PARTNER RELATIONSHIP
Direct working relationship	<i>Close and direct working relationship; actively share clients leads; joint and separate clients with close coordination; jointly sponsor community events</i>			
	Connect Northwest	Community based networking programs including Springboard, Investor Forum, Entrepreneur Development Workshops, NWCSA, Special Interest Group Forums	SIRTI focuses on assisting technology based companies grow; SIRTI refers companies ready for external capital to Connect NW for coaching and investor connections	Connect NW provides an important resource to SIRTI clients in providing access to a community based private sector network of advisors, service providers and regional investors
	Northwest Business Development Association (NWBDA)	Small business financing	SIRTI contracts with NWBDA to operate the Technology Growth Fund, a loan fund focused on technology based high-growth companies	NWBDA provides a lead stream of potential clients, and the loan program provides SIRTI clients an important financing option
	WSU - Spokane	WSU collocated urban campus	SIRTI's fiscal agent, administrative, operational and business support services, shared resources.	Joint sponsorship and collaboration on many levels.
SIRTI actively supports	<i>Primarily at the request of the partner organization, SIRTI provides active and direct support</i>			
	WSU Research Foundation	Licenses and commercializes WSU developed technology	SIRTI provides Commercialization and company "spin-out" assistance services at request of WSURF	WSURF provides candidate technologies and potential "spin-out" clients to SIRTI
	Centers for Disease Control	Licenses and commercializes CDC developed technology	SIRTI provides Commercialization and company "spin-out" assistance services at request of CDC	CDC provides candidate technologies and potential "spin-out" clients to SIRTI
	Pacific Northwest National Laboratory (a national energy lab)	Develops, licenses and commercializes technology	SIRTI supports Lab on development of technologies	Lab provides an important source of technology knowledge and specialized equipment assistance to SIRTI clients
	Spokane Area Economic Development Council	Regional economic development	SIRTI provides recruiting and retention support upon request	EDC provides client leads to SIRTI, assists in marketing SIRTI incubator out of region

PARTNER ROLE	PARTNER ORGANIZATION	PARTNER ACTIVITIES	SIRTI ACTIVITIES	PARTNER RELATIONSHIP
	Spokane Regional Chamber of Commerce	Several programs including BizStreet Program (BIC, PTAC, SCORE)	SIRTI refers clients for specific services (PTAC) and leverages assets (BIC)	Chamber provides client leads to SIRTI, assists in marketing incubator in region
	Spokane Valley Chamber of Commerce	Business connections and networking events	SIRTI support Valley Chamber programs	SIRTI receives client and incubator leads
	Washington Technology Center	Washington State technology coordination and development	SIRTI supports WTC programs in the Inland Northwest	WTC provides an important link to Western Washington resources for SIRTI clients
SIRTI indirectly supports	<i>SIRTI supports the educational activities related to entrepreneurial development; occasionally calls on or is called upon for direct support of a specific project or activity</i>			
	Hogan Entrepreneurial Leadership Program – Gonzaga U.	Undergraduate program prepares students for new venture creation – “virtual” incubator program	SIRTI refers project candidates; occasionally directly participates in Hogan programs	Hogan Program provides client leads
	EWU Center for Entrepreneurship	Entrepreneur Workshops	SIRTI refers clients to EWU workshops	EWU provides client leads
	Regional Universities and Colleges (WSU, U of I, EWU, Gonzaga, Whitworth)	Student entrepreneurial development program; specialized technology knowledge and equipment	SIRTI supports educational activities (i.e. lecturers, facility tours, projects); provides internship opportunities; refers clients with specific technology knowledge or equipment needs	University and Colleges provide intern candidates; access to specific technology knowledge or equipment
Referral role	<i>SIRTI refers non-technology companies to these partners or uses specific capabilities for our clients; these partners refer technology based companies to SIRTI</i>			
	SBA	Business resources and workshops for start-ups	Client referrals and financing alternatives	Client referrals
	AHANA	Business resources for minority based companies	Client referrals	Client referrals
	SNEDA	Revolving Loan Fund for start-ups	Client referrals and financing alternatives	Client referrals
	Washington Small Business Development Center (SBDC)	Business resources and workshops for start-ups	Client referrals	Client referrals

