

DEVELOPING AN

Innovation Economy

A

STRATEGIC ACTION PLAN

for Spokane & The Inland Northwest

Sponsored By



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Appendix C

LIST OF SURVEY PARTICIPANTS

SELECT SURVEY RESPONSES

Extract of Appendix C from the Innovation Economy Study

*“Developing An Innovation Economy — A Strategic Action Plan for Spokane & The Inland Northwest”
was sponsored by INTEC, SIRTl and the Spokane Area EDC
and prepared by The Morgan Leigh Group*

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Note: We necessarily had to limit our survey participation due to time and resource constraints. There are many other individuals who would have been asked to participate had circumstances permitted. Of those listed above, all were invited to participate, but not all were ultimately able to do so.

Survey Responses *(Select)*

Triangle of Innovation (All Surveys)

At the core of the Innovation Economy is research capacity – largely universities, national laboratories and private research. Our region has significant research capacity, which is principally anchored in three metropolitan areas: Pullman / Moscow, Tri-Cities and Spokane / Coeur d'Alene. (Please see attached conceptual diagram.)

Question – Is there merit in collaborating regionally to create a new image (and brand) for our region based on our research capabilities, intellectual capital, technology orientation and other important areas related to innovation and entrepreneurship? If so, what actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—There is merit in creating an image and branding for the region if the image is based on unique and sustainable attributes that support a mission of innovation and entrepreneurship.

Initial actions: develop and implement an action plan based on the Tripp-Umbach regional biomedical economic development study. Consider a second study to identify other regional strengths and, in particular, unique capabilities.

Most important action is to establish incentives that will draw all points of the triangle toward a common goal. Identify what is most important to each locale and determine how a collaboration can help achieve its goals. Make it possible for each locale and each organization within the regional partnership to shine on its own while achieving the goals of the triangle.

Potential obstacles, besides funding, may include communication barriers between points on the triangle due to: (1) cultural differences (Pullman/Moscow and Tri-Cities focus on knowledge creation and transfer; Spokane/CDA focus on knowledge consumption and application) which create different expectations; (2) distance, which can impair regular and effective communication; (3) community-centric attitudes, which can eviscerate partnerships.

Response—There is merit in collaborating regionally. To think we can build our communities in isolation is to unilaterally disarm. And to strategically place science and technology as the underpinning for achieving economic prosperity is right on. To get started, you need to identify and collect a set of truly committed, passionate people who will champion this for the long haul. This does not need to be a large group, smaller would actually work better given time and distance constraints. This team needs to sit down and talk – perhaps for a day. Out of this conversation would come the framework of both strategy and organization. The biggest obstacle will be trying to meet unrealistic expectations – and therefore, calibrating those expectations needs to come first. Economic development progress is best measured in decades – but that doesn't mean nothing is happening along the way. Getting the balance right will help prevent frustration over time, and will weed out those who “don't get it”. This needs to be a careful, thoughtful project – not a “create 10,000 jobs in two years” comedy.

Response—Yes, there is no alternative to regional collaboration. There is no critical mass to effectively make any single area viable. If you take the strengths of the regional entities, there is a powerful force of which we need to be taking advantage.

We need to get buy-in and build credibility and trust with all the parties in the region. It needs to be portrayed that there will be equal status positions for everyone. This needs to be a “win—win” scenario for all parties, which holds true the idea of “one for all and all for one.”

A strategy, which includes branding and marketing, needs to be put in place with a clear vision. An operational plan needs to be put into place with equal participation by all parties involved.

The biggest obstacles are ensuring credibility and trust with all participants. Convincing the parties of the level playing field and equal opportunity will be difficult, but it can be accomplished. The idea that the group can accomplish more than the individual need to be instilled in all participants minds; this mental block is an obstacle to overcome.

Open dialogue, group problem solving, and a co-development of the strategy and vision will make this initiative successful.

In moving from our traditional extractive and resource based economy to the knowledge based economy we either work together creatively or we will suffer a slow and painful death.

Response—I believe there is merit in collaboration. A critical initial step is the identification of the intersection of activities where organizations gain resources and capacity by working together that are greater than what they gain

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by working individually. Identification of that intersection in a timely manner and in a way that ensures ownership by the participants is essential. Doing so in a way that reinforces actual change/collaboration is a significant obstacle. Identification of a carrot of significant magnitude that requires collaboration and provides a whole that is larger than the sum of the parts the otherwise exist is a critical element to success. A second element is the acquisition of social science expertise and processes to facilitate the successful completion of this task. I believe that professional expertise will need to be acquired and used for this to be a successful undertaking

Response—The other thing we have to do is help the scientists start businesses. Applied scientists don't do that and, if we want them to spin off technology, we have to do it for them. That means paying people to become CEOs of new companies.

Response—There is always merit in collaborations. For example, WSU-PNNL have approximately 200 research agreements in place each year. I am not convinced “branding” is necessarily good. Branding provides name recognition but it can limit the scope of expected collaborations.

Development of technologies into business growth that derive from the universities and national laboratories actually occurs on a case-by-case basis. Only after the fact can we “brand” these developments into broad categories. On the other hand as administrators or industry leaders we must look for each other's programs with possibilities for synergistic overlaps. We can encourage (usually with small doses of money) positive interactions amongst research workers.

For example, the recent consultant healthcare study by Simon Tripp revealed where overlaps might occur when basic science research innovations lead to laboratory animal clinical trials and eventually human clinical trials through hospitals/clinics.

Response—Yes, regional collaboration would be valuable. The most important issue will be getting people to work together on projects. Most potential participants are very busy and have their own priorities and interests. The projects must be compelling and offer rewards and incentives for participation. The geographic separation is a real obstacle that has and will limit collaborations. Even though potential collaborators are a “short distance,” day-to-day, busy and productive people don't have time for all the travel and meetings.

Response—I believe there is always merit in marketing our region based on the strengths that we have or that we are in the process of developing. However, I think excessive focus on “branding” can sometimes lead to a situation where there is “more sizzle than steak”. In other words, unless we truly have the resources to substantiate the claim we stand to lose more in credibility than we have to gain.

I believe before any “branding” can be done; we need to decide to whom we are going to market this brand and for what purpose. Once this is determined then we need to analyze the overall community landscape and identify what elements exist that could potentially hurt our effort.

One example is that if the “branding” effort were aimed at luring outside companies and business to Spokane then we would identify the City Counsel as an element that might be worth our attention. If we are representing ourselves as a progressive, innovative and collaborative region then it would make sense that these traits are exemplified even at the highest levels, which do not seem to be the case.

However, once the true core competencies of our region are identified and developed then we are able to work collaboratively as a community to eliminate potential problems before they show themselves. This will then allow us to not only project a brand, but reality as well.

Response—I believe so. I think the region would benefit from a stronger national brand and from a brand which suggested innovation as a core value. Initial actions should include local agreement/consensus among players in Spokane County. Biggest obstacles will involve adopting a common brand while permitting communities to retain identity.

Response—Clearly, any branding effort would be better than what we have now. I would support an image development process that speaks to our strengths and to our dreams for the future. The first action would be to identify some resources (\$\$\$) and the requisite talent to work with a select group of stakeholders on a branding project. The challenge will be who to select as talent and who are the appropriate stakeholders.

I think that the most important element of this question goes to how the community sees itself now and in the future and how to link that vision with the initiatives underway to transform the regional economy.

Response—Yes, collaboration is vital to the success of new and innovative ideas. Forming relationships is the first vital step to further developing this region's image. The economy does not accept any misdirection, and therefore, collaborations will

bring in the money. Together, education, business, and the economic community need to identify innovative ways to work with each other. Success will come with collaborations; individuals cannot achieve the success a group will.

There could be a perception that the money will not be allocated equally, which would lead to mistrust and lack of communication. Barriers of mistrust need to be broken down in order to remove the “silo” approach to economic development. Communication must stay on the table in order to enable successful collaboration over time.

Response—Yes, there is merit in this work. The big obstacle is that the people in these areas do not come together in a forum that provides for coordinated or collective action. We need to convene ways for this dialogue and conversation to occur.

Response—There is definitely merit in creating a new image and branding our region based on the research and intellectual capital. The challenges will be the distances between each metro area, the attitude of “what’s in it for me” and how to build successful relationships between key intellectuals in each center considering the first two issues.

Building the relationships will be the most important challenge. If successful, positive relationships can be built by any means, many of the other challenges will be overcome. The geographic challenge may be overcome by Fiber, High Speed Rail or by simply making the commute easier by providing better wireless, air and bus services.

Response—One of things that I continue to see is that Personal and Corporate agendas simply get in the way. This is such an odd community to live in, as there are many people whom actually do not want their peers to succeed. I have also noticed Silo’s. What I mean by this is trade organizations overlap with one another and create confusion about what the end game is and who is getting credit for it. Sure wish people and leaders would stop being concerned about who gets the credit and simply collaborate it getting some successes in our region.

Response—We need to start at the core in order to make the triangle of innovation work. Beginning with the higher education centers and a statewide partnership branding this region is possible. UW has a lot of stuff that we can use i.e. Research, and a partnership is valid. We also need to create regional partnerships and position SIRTII and INTEC in Olympia showing that we are working over the lines and “solidifying funding” through collaboration. Energy and Biotech clusters are our silver bullets—we need to use the Simon Tripp analysis to better use our region.

Response—Merit, yes! Bridging the gap between those with ideas and those with money to invest, needs a focused and collaborative process. Turf and funding are the main obstacles.

Response—We definitely need to reshape our image. The Eastern Washington area has several perceived negatives, many but not all of which untrue. We need to counter some of the negative perceptions as well as accentuate the many positive attributes that our region has to offer.

The following are a few perceptions that I’ve heard about.

1. No Ethnic, cultural or lifestyle diversity.
2. The Aryan Nations are our neighbors and still active. This is often extended to mean that the people in the area are racist.
3. It rains all the time (they think we are a suburb of Seattle).
4. There’s no technology in the area. It’s all mining, farming and logging.
5. My wife/husband will not be able to find work.
6. Spokane has a high crime rate. This may have to do with the unbalanced press coverage that our area gets in other regions.

Response—If so, what actions should we take initially?

1. Identify what groups/organizations are involved.
2. Identify what steps by these groups have or plan to take place
3. Regional Mission needs to be drafted and agreed upon
4. Regional board needs to be established
5. Goals, and actions items need to be established and assigned with timelines

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Which are the most important?

1. Listed in importance above #1 being most important

What will be our biggest obstacles?

1. Too many groups working on bits and pieces of the same mission
2. Narrow down the scope and assign each group or groups a piece of the pie
3. Education of both communities on the value of being seen as a region and this being a regional effort- (need key business leaders at act as champions)

Response—This is an important breakthrough in thinking about the greater Inland Northwest as a technology corridor. This Proposal will finally create a large enough core area of entrepreneurial resources to be taken seriously by corporations, investors, and our community leadership. An excellent example of a geographically focused area of high-technology research and development, with university support, is the Research Triangle Park in North Carolina. The RTP was formed by three universities and now has over 140 organizations and 42,000 employees. RTP is now recognized worldwide as a hub of innovation.

There are three required components for creating an area of innovation:

1. Support of the Universities. Gaining the support of our Universities is critical to this effort. We are fortunate in the Inland Northwest to have a number of important and nationally recognized centers of education. These universities can provide the critical engine of higher education and the fostering of talent, ideas, technologies and funding. The Inland Northwest must model the examples set by the universities that help create economic growth in their regions by providing strong linkage to the corporate, entrepreneurial and investment communities. Stanford University is an outstanding model of this success formula. Stanford creates and licenses technology and facilitates funding to promote new companies and new ideas. Silicon Valley owes much its success to Stanford University. Duke, the University of North Carolina, and North Carolina State University form Research Triangle Park. The University of Washington supports innovation through technology licensing and funding. In the East, MIT and Harvard are critical drivers to the Route 128 research and development corridor.
2. Attracting Investors. Once you have a critical mass of innovation, investors will come. There are thousands of venture investment firms competing for opportunities to invest in innovation. What we have been lacking in the Inland Northwest is the required mass of opportunities to warrant the serious interest of ventures investors. VCs want to work in regions of rich innovation where they can optimize their opportunity costs. Why do you think that the VCs are headquartered in innovation areas like Sand Hill Road, Austin, Raleigh-Durham, Seattle-Bellevue and Route 128 in Boston? Once a critical mass of innovation is established, with the support of the Universities, “They will come”. So will all of the support resources required.
3. Fostering Entrepreneurs. Lastly, to succeed we must foster entrepreneurship. Entrepreneurial leadership comes from centers of innovation: universities, research centers, and successful research and development oriented corporations. We have very few examples entrepreneurial success in the Inland Northwest. Much of our talent leaves to other centers of innovation, where they can raise capital, hire and network in a community of start-ups and support organizations (attorneys, investors, accountants and consultants). Not only must we foster entrepreneurial zeal, we must help support its growth through education, mentoring and opportunity.

The Inland Northwest must capable of competing on a global scale for talent and capital. To be competitive in these global markets, we must create a community that attracts and fosters innovation, investment and entrepreneurial leadership.

The biggest challenge will be gaining the support of and managing and coordinating the constituents. Since this program is going across political, state, and regional boundaries, it will require a significant amount of consensus building and management to keep the agenda focused on the bigger picture. This is where it can breakdown. You must create a governing body of trustees that can think macro, operate micro and attract funding.

Response—Absolutely. We not only need to create a regional image for national consumption, but to reframe our self-perception both locally and regionally. Collaboration among our regional research institutions will give the region more intellectual firepower to take a leading position in the global economy. We should recognize that we have eight senators

and a half-dozen congressional representatives who can work on behalf of our region, along with four governors and a slew of state legislators and county and city political leaders. One way to bring all this political strength to bear would be to create a regional council uniting these leaders and getting them to lobby on our behalf at all levels toward a plan to reinvigorate the economy of the Great Northwest. (We also have Canadian representatives with a vested interest in seeing this region succeed, whom we ignore completely.) On the research front, we should move immediately toward creating a virtual research university that allows collaboration among the research institutions--and this means eliminating wasteful turf battles. For example, if a scientist at PNNL and another at WSU and another at UI can work together to create a new method for simulating virus impacts on cell chemistry, there should be absolutely no obstacles to that collaboration. And if these scientists discover that there is a marketable product that can be created from their work, they should not only be allowed to commercialize the product and create a startup or find entrepreneurs who will create the startup for them, they should be strongly encouraged to do so. That should be one of the primary goals of this virtual university. (Incidentally, the virtual university itself could be a hotbed for new product testing, using our outstanding regional fiber network to develop new ways to collaborate over the Web, to transmit huge volumes of data, to work collectively and interactively with visual images.)

Our biggest obstacles are ourselves. We have to believe we can do it. Our university administrations have to work proactively to make this happen. Currently, the WSU administration either actively or passive-aggressively stomps on commercialization of technology. We also have to recognize where we really are: neither WSU nor UI is a major research institution. The administrations have to be committed to playing catch-up, rather than pretending to be something they're not. But with the help of all those senators, representatives, and governors, catch-up may not be that hard. We have more firepower than any one state, because we're a super-regional economy. The states of Washington, Idaho, Montana, and Oregon have to work together, along with the provinces of British Columbia and Alberta. As far as I know, there's virtually no collaboration among the states, and no one to drive such an effort. We also have to work to reframe the local and regional state of mind--and that's a big obstacle. A cognitive dissonance has set in that has led many people to believe that because the area is poor, it has always been poor, and will always be poor, so therefore we should accept our lot and not try to rise above ourselves. In fact, the area is not poor and economic statistics show it is growing faster than the national economy. We have to create an image that we are on the cutting edge, and that will take a lot of concerted effort.

Response—Yes, there is merit, but I think it'll be hard to tie the three regions together because of the physical distance between the areas. It's hard to package the three areas into a logical solution for business.

Response—I do not really know enough to comment with any certainty. Off the cuff I don't really understand why the Tri Cities are included. The schools in Pullman and Moscow are definitely a plus for the Spokane area. Typically, the larger the area, the more difficult it is to brand the region. However, with more input from you as to why this particular area is selected, I can see the benefit from collaboration.

Response—Collaboration is important in R&D and entrepreneurship. However, one collaborates with others primarily because of common interest or need not geography.

A brand for the area would be awesome but what would it be?

The three areas already seem to have their own brand and these should be capitalized on.

PNNL = Energy/environment

WSU = Ag/biotech, animal and food science

Spokane = Healthcare

Biggest obstacle is defining or developing a common theme among the three areas.

Response—Yes, first find our strengths/weaknesses, capitalized on the positives and move strongly forward to bring the structure into place to have the strong points more under one united group. Work to improve the weaker points that are needed to have a strong and growing mass for the overall program. Getting to have a united effort may be the most difficult thing to get into place. The second most difficult is obtaining the financial support to carry the effort out.

If you are working on the "triangle" of bioscience between the Inland Northwest (INW). With Portland and Seattle also in the biotech business, the first thing that needs to be done is to work on the Inland Northwest team work first, develop some understandable structure here and start expanding the development of science discovery as quickly as possible. It will be important that Portland and Seattle not get the signal that INW is trying to compete with them. It will be important

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that they understand that we want to work with them instead. I think it will be essential to obtaining funding by trying to antagonize those two areas. The legislators are the same for both of the areas. The legislators will want to please the west side first and then the INW because they live on the west side and the most voters are located there.

Response—There has been collaboration in the E. Wash. Region research community for decades. More communication in the community will enhance the level of collaboration. Where collaboration occurs, there has been very positive, forward thinking activity. Those who do not network and collaborate do not know of what is already occurring. Non-technical professionals are not adequately informed of what is going on and are not in tune with skills and risk comfort levels that are needed for more progress. Our biggest obstacles are ourselves. Our lack of hard work and supportive cooperation. There is NO ROOM FOR NEGATIVE COMMENTS OR SELF DEPREDATING DIALOG.

Response—Yes there is merit in collaborating regionally. The fact that our research capabilities are not located in one geographical area is our largest barrier. The most important actions that the Inland Northwest could do to boost innovation and entrepreneurship are those that foster closer relationships between the research organizations. An interdisciplinary liaison should be hired to work with the research organizations and local industry to put potential collaborators into contact. Ideally, this person should not be tied to any one organization but work for the benefit of the entire community. A communications specialist should also be hired/appointed to coordinate the teleconferencing of events such as seminars, panel discussions and the like to each of the major centers and companies. Most of the major organizations, both academic and industry, have teleconferencing abilities that are underutilized. In this manner researchers at geographically distant locations will learn about related research, keep abreast of new developments and meet potential collaborators.

Response—

-A regional approach is critical – to build positive image and integrated approach to developing broad-based economic opportunity.

-Important to do: connect the Universities in the region at the “policy and vision” level. Encourage entrepreneurial leadership at all universities. Link research capability to Spokane.

-Obstacles: Lack of strong university leadership. Lack of common vision in region. Too many groups exist with a control mentality masked in bureaucracy.

Response—I believe there is always great merit in cooperation, collaboration and partnership. However, don't set your sights too low. A strong integration between the activities in Spokane, Pullman and Tri-Cities is important. But equally important is a strong integration with the activities in Puget Sound and Portland/Vancouver and Vancouver BC and Boise. The three-part area described as the Triangle of Innovation is undersized to be sustained on its own. There is no internal market to allow the ideas to take hold.

There is an assumption that (I believe) underlies this question about the value of research. That assumption seems to be that access to a research capability is the key component for an innovation economy. My personal belief, which is also supported by the studies I have seen, is that an academic & research environment, not simply a research capability, is one of the key elements of an innovation economy. As the Milken TechPoles study describes it, a strong university is one key to a local innovation economy. This is not primarily because there are research ideas resulting from the university that can be commercialized (even though such ideas do exist). It's due more to the fact that a strong research university creates an atmosphere in the community of innovation, of exploration and of intellectual curiosity. In addition, it produces a number of potential workers that share that curiosity AND happen to like living in the community (or they wouldn't have been there for school in the first place).

Thus, when I translate this idea to Spokane, it's clear to me that creation of a local academic and research community is critical. Only part of this can be captured by effective linkages with remote institutions. That linkage should not be discouraged - in fact it should be encouraged. However, it's not a substitute for the local presence of a educational/research institution(s).

As to the point about branding the interaction, I think collaboration is key - branding is not. The only case in which such a branding would be valuable is if it helps the partners identify why they participate in the group. However, I don't see that branding something like the Spokane/Pullman/Tri-Cities connection as the Technology Triangle will significantly affect accomplishing the real goals of innovation and technology as a key component of the Spokane/Inland Northwest economy.

Response—Yes, an intra-institutional development council with purpose to raise the visibility of regional resources and support. The biggest obstacle will be the preference given to major research institutions and medical school.

Response—Yes, I think there is benefit to branding our region based upon the mentioned capabilities. It will help in retaining and recruiting new and old companies, CEO's, entrepreneurs. We need a very simple and catchy slogan similar to other research triangle areas like at Duke, Austin, Boston, etc. Biggest obstacle is getting consensus on the right slogan and message to promote. I would suggest contacting people who have moved or relocated their businesses to this area to see what works and doesn't. Many of the stuff I have seen in the past from the EDC, Chamber and SVB are poor and ineffective.

Response—The most important is to determine a regional focus. Next to agree on the focus and to move forward. In our case, the focus is on bringing Biotech manufacturing to Spokane in our opinion enhanced Research capability will follow. There is an undercurrent in Spokane even among those relatively new to the area that if they have a good idea someone else will try to capitalize on the idea and try to make it theirs. The focus needs to be the adoption of the best ideas regardless of who originated them.

To help improve the image of the area there are certainly many things that could be done, I will simply concentrate on one-eliminate the reference to this area as the Inland Empire or Inland Northwest.

Regional Collaboration (Survey 1-Leadership)

Groups with a vested interest in job growth and economic development in this "Triangle of Innovation" region include county governments, municipal governments, chambers of commerce, economic development organizations, business incubators, entrepreneur groups and many other organizations.

Question – Given the tremendous potential benefits of regional collaboration, how can we enable these groups to work together in a collaborative fashion – to understand that we are all stakeholders in our regional economy? What actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—Perhaps a "stakeholders" group is in order and the formation of such a group may be a good "first step". The biggest obstacles are probably logistical (large geographical area, time constraints etc.) and to some extent "turf" issues.

Leadership for an Innovation Economy (Survey 1-Leadership)

Developing an innovation economy for our region is a very complex proposition – and one that will not occur organically. Rather, it will materialize through visionary leadership, uncommon collaboration and a clear focus on results. Leadership possessing a regional perspective, a teamwork approach and a bias for action is critical.

Question – How do we best surface and engage the leadership necessary to orchestrate our regional transformation to an innovation economy and to provide strategic coordination for the entire process? What actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—Continue the good work of INTEC. Continually strive to invite all area leaders to the table. A big obstacle will be the need to overcome some people's view that the "downtown elite" control the agenda

Partnership Structure (Survey 1-Leadership)

In creating an innovation-based economy, we are seeking to grow the overall pie for the benefit of everyone in our region. It is important that all key groups and organizations throughout the region have the opportunity for meaningful involvement. As has been the case in comparable regions, this will require some level of structure.

Question – What approach should be used to develop a regional structure that allows for involvement by multiple groups and organizations and yet enables rapid progress? What actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—Stakeholder group.

Regional Venture Capital (Survey 2-Investment Capital)

While we do have several notable funds in our region, a major concern among our area entrepreneurs, startups and economic development organizations is that we experience minimal VC investment in companies in the “Triangle of Innovation” region relative to comparable geographic regions.

Question – Is there an opportunity to create a venture capital fund with a focus on the “Triangle of Innovation” region, similar to Highway 12 Ventures in Boise or SmartForest Ventures in Portland? If so, what actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—1. Talk to Fred Brown—he is working to launch an angel fund.

2. Support Tom Simpson and Phil Sandifur in their recent effort to hold a VC Forum in Spokane and invite regional VC’s to attend

3. The biggest obstacle to setting up a new, triangle focused VC firm will be the terrible investment climate and ...poor VC returns, the relatively scarce investment opportunities, and raising the money.

Response—I don’t think a VC fund will help the region most effectively. Most innovations and startups require the use of angel investors. Therefore I would suggest that someone try to get them better organized in this region as a priority. I think we have adequate coverage in the region for VC investment. So far we have 2 good local VC funds (NWVA & Jaguar) along with Highway 12 based out of Boise, ID. However if there was a big push to create a new regional fund, I would wholeheartedly support it since more funds are better for the area as a whole. Biggest obstacle is that most angels don’t want to be identified, as people who have lots of money so getting them to sign-on to an organization will be a challenge. However once a few angels make some money and it gets publicized in a tactful manner, I’m sure other (angels) will surely join or want to get more involved.

Angel Investor Networks (Survey 2-Investment Capital)

In our region, we have many accredited investors who actively seek for new investment opportunities. While there have been some efforts to bring together these investors for purposes of education and exploring high potential startups from our area, these efforts have not been sustained.

Question – What can we do to improve the interactions among angel investors in our region and promising local startups seeking funding? Is there an opportunity for a formal organization such as the Alliance of Angels network in Seattle? What actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—This is promising. There are some angel funds in Spokane (Raven, Jaguar), and Fred Brown is working on setting up a new fund. This organization will probably play a role similar to the Alliance of Angels networks, but will also have money to invest.

Response—I would try to find an official organization that could help us start an angel alliance similar to the one located in Seattle (ie. Alliance of Angels) started by Bill Gates Sr. at Preston Gates Law firm. It has a very non-political affiliation yet the merit and experience behind it to be successful. I think we have enough bright people in the area to get this done, I don’t think organizations like technet and others have the ability to do it since they don’t have people on the board who have experience as angel investors. Maybe we should contact the seattle group to see if they can help us start a chapter in Spokane. Or have one of the local venture funds help out with the creation. Biggest obstacles is getting the local angels to invest or pay to be a part of something that is brand new in Spokane when there are other organizations that I’m sure have asked them for membership dues. Plus the local dealflow is pretty slow right now, many local entrepreneurs are confused about how VC money works for example the difference between venture capital and a business loan.

Other Important Forms of Investment Capital (Survey 2-Investment Capital)

In our region, we have a number of organizations that provide a significant level of assistance to entrepreneurs and startup companies in exploring and securing other important forms of investment capital such as debt financing and technology grants.

Question – Do we have sufficient levels of alternative forms of investment capital such as debt financing and technology grants available in our region? If so, do we need to do more to make sure that entrepreneurs and startup companies are aware of them? What actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—Some organizations do a pretty good job of publicizing their services (eg. SIRTI, SBA). I am supportive of the Entrepreneurs Forum and the boot camps, which provide valuable information and contacts to start-ups.

The best way to reach the widest audience, in my opinion, may not be the most efficient but it involves multiple sources/orgs. Publicizing the same info to ensure the broadest reach (ie. EDC, Chamber, EFGN, SIRTI, Technet, INTEC, etc.)

Response—I think we don't have enough or any credible groups offering debt financing, perhaps a new bank needs to be created or recruited to the region to offer this type of financing. I wish local banks would take the initiative to start a new financing program. In addition, we have not done a good job marketing all the available resources to local or regional entrepreneurs or existing startup CEO's. Biggest obstacle is the belief and costs to put a marketing program together.

Centers of Excellence (Survey 3-Research Capacity)

Research institutions are critical components in the growth and development of regional economies driven by innovation and technology. These research institutions are noted for having "centers of excellence", recognized for the quality of their top researchers and cutting edge nature of their research projects.

Question – What specific centers of excellence – with a recognized core of researchers and research projects – do you recognize as existing in the greater "Triangle of Innovation" region? Which of these are our most significant? Are there other emerging centers of excellence? What are they?

Response—

Most Significant Centers

- Water Resources Centers and related program activities
- Microelectronics and Communication Centers and related program activities
- Biomedical Research Centers and related program activities
- Agriculture and Food Safety Centers and related program activities
- Biotechnology and Bioremediation Centers and related program activities

Significant Centers

- Material Science Centers and related program activities
- Natural Resource Management and Conservation Centers and related program activities

Emerging Centers

- Transportation Centers and related program activities
- Energy and Bioproduct Centers and related program activities
- Information Assurance and Biosecurity Centers and related program activities
- Bioinformatics Centers and related program activities

Response—We've done many studies of what our clusters are, and they stay pretty much the same. If we're not attracting companies from these clusters, then maybe they're not clusters after all. We're trying to add biotech; and we should add computer security (homeland security measures). We should also add some of the smaller disciplines like GIS.

Response—Washington State University is a solid land grant research university that expends more than \$130 million

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per year in our research programs – of which \$105 million is externally funded. We have programmatic areas of research strength (Molecular Bioscience, Biological Chemistry, Shock Physics, Neuroscience, Plant/Animal Reproductive Biology, Environmental Remediation are examples) and then within those areas we have pockets of “research” excellence based upon far fewer faculty. Broadly speaking both WSU and University of Idaho have greatest “applied research” strength in facets of agriculture – particularly plant science. The two universities plus PNNL have pockets of outstanding researchers in molecular plant breeding & physiology, biological mass spectroscopy & NMR spectroscopy, bioinformatics, and bio-sensors. The two universities plus PNNL have good infrastructures to support their research, i.e. laboratories & equipment. PNNL has extra strength in nanotechnology, environmental remediation, and energy conversion studies. Both the University of Idaho and WSU have strengths in environmental monitoring and remediation. The University of Idaho has faculty working on cyber-security.

There is a potential for everyone to contribute Homeland Security but R&D contributions might be secret or at least proprietary; and the customer will be the Government and will indirectly benefit the citizen.

Spokane (the community) has little strength in basic or applied research by comparison. It has potential to offer patient-subjects and doctors for clinical trial studies – applied research. WSU-Spokane is still pretty small in terms of numbers of basic scientists. Spokane’s few IT or software companies are not R&D giants. I understand Spokane’s healthcare data management consortium is a success, but the software used is not Spokane developed.

Response—In my opinion our regional excellence lies largely in healthcare. Unfortunately, it is lacking in recognition for the discipline of medicine (as opposed to other allied health fields) because we lack a medical school. We have high quality schools of pharmacy, nursing, etc., but these programs are insufficient to drive a major force in current biomedical research. However, we do have excellence in clinical medicine and research. Many clinicians participate in clinical trials, but few do original work or publish in these areas. The Heart Institute of Spokane is the exception. In addition to performing clinical trials, they have been leaders in original clinical studies and have developed a program in molecular and cellular studies that bridges bench-to-bedside. To my knowledge, they are the only group working in translational medicine in the region. Furthermore, because of their excellent science and innovations, their clinicians are now writing and leading clinical trials. For example, Dr. Katherine Tuttle wrote the protocol and is the national primary investigator for the first new treatment for diabetic vascular complications (nephropathy) in more than a decade. The Institute has worked diligently to support its programs through clinical revenue, grants, and fund raising. They receive no government support. They are model of research excellence in this community and the region.

The WWAMI program exists in the region primarily in a teaching capacity. We should explore a more formal research association through the WWAMI program. This would allow greater recognition of medical research by association with the UW medical school, one of the best in the country. Many of us are already training their students and residents through the teaching programs. If our research were similarly recognized, it would increase funding opportunities and national recognition. The UW medical school would also benefit by association with even more excellent and innovative research.

Response—

- 1) The Heart Institute Research
- 2) Oncology Research
- 3) Soon to be—genetic research
- 4) Ventricular assist device research at Sacred Heart
- 5) SIRT1
- 6) WSU
- 7) Other Universities

Current Research Initiatives (Survey 3-Research Capacity)

Research in a region is often measured through its inputs, outputs and visibility. Inputs include elements such as funding and the number of researchers. Outputs include elements such as patents and published research reports. Visibility includes recognition given to team members and the area of focus through the media or industry groups.

Question – In terms of researchers, funding and the potential value of resulting intellectual property, what would you consider to be our current most noteworthy research projects, both at your institution as well as throughout the “Triangle of Innovation” region? Are there similar projects or initiatives that are likely or on the immediate horizon? What are they?

Response—

Current Most Noteworthy

- Water Resources Centers and related program activities
- Microelectronics and Communication Centers and related program activities
- Biomedical Research Centers and related program activities
- Agriculture and Food Safety Centers and related program activities
- Biotechnology and Bioremediation Centers and related program activities
- Bioinformatics Centers and related program activities

Immediate Horizon

- Material Science Centers and related program activities
- Energy and Bioproduct Centers and related program activities
- Information Assurance and Biosecurity Centers and related program activities

Response—

UI: Water resource management, bioremediation, food sciences, microelectronics, biomolecular research, computer security.

Response—

Intellectual Property: Most new Intellectual Property disclosures at WSU are related to agriculture and plant sciences. There are very few software inventions being disclosed. Most Intellectual Property developments at PNNL have been related to improvements to laboratory instruments and/or software that support laboratory data analysis. The output of Invention Disclosures per \$1million R&D is less than average nationwide.

I am not downplaying the importance of these innovations. Some show real promise. We must, however, recognize the number of years it takes to get an idea out of the laboratory, developed into a marketable product, AND have sufficient commercial potential to reach the marketplace. Having a strong and growing Intellectual Property portfolio is vital for the research institutions. Realistically we must recognize only one technology in two thousand becomes a big hitter.

Furthermore, while the universities and PNNL want to help high technology companies grow in our region, we are obligated by the Bayh-Dole Act to license our technologies to companies that show strong promise to commercialize the technology – get the technology into use for the benefit of the public. In practice this means our technologies are licensed outside of the state. (Note: nearly all of the University of Washington’s technologies are also licensed outside of Washington – often into California.)

Research Initiatives: At WSU-Pullman we have a new commitment to grow faculty capacity and institutional capabilities in biotechnology as related to plant & animal organisms, health improvement & economic development, improved devices & new software. I believe our focus will remain on fundamental science/engineering more so than applied science/engineering, if for no other reason than our dependence upon research support for fundamental science/engineering by NIH, NSF, and DOE.

There are smaller high quality programs, e.g. Shock Physics & Materials Science Research, involving fewer faculty that are well funded by DOE, ONR, ARL, DARPA, etc.

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Comment: I believe the nature of federally funded research is changing. There is and will be less altruistic interest in supporting the research of individual faculty. Instead the agencies are more likely to fund research undertaken by interdisciplinary groups. This shift will provide new opportunities for research growth. It will pose a problem for academic departments that have missions to broadly educate undergraduates and require first-rate faculty in many sub-disciplines.

At WSU-Spokane there are opportunities for more applied science efforts per the example of jointly participating in clinical trials in Spokane. At PNNL there is renewed interest in forming a bio-products focus coupled to new energy conversion technologies.

Response—The Heart Institute. In its basic science lab, several novel observations have been made. Their investigators are receiving national recognition for this work, as well for the original clinical studies. The possibility of filing a patent related to some of the laboratory work is being explored. Access to technology transfer resources in the biomedical field may be somewhat limiting locally or regionally. For example, the UW medical school has tremendous resources in this area. Closer collaboration with them could improve the process of moving toward commercial potential. To my knowledge, our local resources have had more experience with non-medical discoveries.

Response—

- 1) Heart Institute Research
- 2) Carotid Research
- 3) Lab Testing Research
- 4) Transplant bridge device research
- 5) Cosmetic Research

Growth in Research Capacity (Survey 3-Research Capacity)

Research capacity can grow regionally in step functions or in modest increments within existing areas of expertise. A good example of the former is the relocation of Dr. Gary Maki and his Center for Advanced Microelectronics and Biomolecular Research (CAMBR) to the University of Idaho Research Park in Post Falls.

Question – What are the most promising opportunities or potential initiatives for us to strategically expand our research capacity throughout the region? Are these related to existing centers of excellence or areas of expertise? What actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—

Bioinformatics initiatives

Biomedical initiatives

Biotechnology initiatives

Electrical power and transportation system security initiatives

Energy and bioproduct initiatives

Food safety initiatives

Information assurance initiatives

Material science initiatives

Microelectronic initiatives (CAMBR for example)

All are related to existing centers of expertise

Identification of existing industries and businesses that might support or provide leverage for an enhanced research enterprise is important. The availability of a technical workforce is important. Facilities and infrastructure to support the research enterprise is critical and probably most important and the biggest obstacle.

Response—Maki's group is moving to Kootenai County because of its quality of life (over Moscow/ Pullman). We'll have to encourage other institutes from both universities that have the clout to make/move their residence choices. But, of course, that gets into the competition with those cities. We may have to settle on a business expansion here – to

augment the research that would stay in the Palouse.

Response—This question takes regional research development beyond the traditional missions of the research institutions themselves. You suggest relationships with private sector R&D based companies that might grow or might wish to locate in our region. Such R&D based companies are expected to strongly interact with the two research universities and PNNL.

The mechanisms for interactions are: (1) regular informal access to scientists; (2) private & confidential access to scientists through private consulting agreements; (3) access to research programs and laboratories at the institutions via sponsored research agreements; (4) mutual development of technologies protected through patents and license agreements; (5) use of other contracts to build a legal platform for trust (material transfer agreement mutual non-confidential disclosure agreements, etc.) that honors the limitations imposed by law; (6) mutual and confidential diligence reviews of emerging technologies (pre-patent); (7) supply a trained workforce to local companies through standard scientific or engineering curricula and certificate programs; and (8) supply non-science/engineering workforce who understand the requirements of technology based or R&D based companies.

Regional technology based economic development has other requirements. There must be “champions” at all levels. I believe our regional leaders/stakeholders wish to see success in developing a high technology economy for the region. Each has a part to play. Each has their own set of motivations and measures of success. (For example: Community agencies are interested in growing employment whereas companies are interested in growing sales and profits.) The stakeholders must trust, understand and talk to each other regularly. Some government agency – really it’s the CEO/President/Director - (INTEC, SIRTI, Universities, PNNL, WTC, CTED, EDC) must assume responsibility and have the budget to facilitate these positive interactions. In the end and with a great deal of patience, however, it is the private sector that must perform and be successful. Stable companies must form & develop. Business plans and cash burn must be solidly managed. VC and institutional investors must anticipate a realistic profit. Business service providers must have technology-literate managers to pro

Response— Grow biomedical research (see above). The Medical Research Institute (MRI) appears to be a step in that direction. It will be critically important to keep and expand physician investigators for true, innovative medical research. A major obstacle to recruitment and retention will be lack of recognition and funding. However, the support proposed for the MRI should be very beneficial in overcoming this obstacle.

Response—

1. Research in heart/kidney and diabetic treatment at the heart institute is led by highly qualified professionals. Expanding research in that setting would be very productive.
2. Newly recruited experts in genetics research to sacred Heart and WSU is promising

Research Institution Policies (Survey 4-Technology Commercialization)

Research institutions are often not fully aware of the important role that their researchers and research projects play directly and indirectly in the regional economy. For historical and other reasons, their charters, policies and guidelines are often detrimental to entrepreneurial researchers and potential industry partnerships.

Question – Are there institutional charters, policies or guidelines that meaningfully impede our regional ability to commercialize important technologies developed at our research institutions? What are they? What actions would you recommend to address these impediments? Which are the most important? What will be our biggest obstacles?

Response—University faculty are rewarded for publishing and getting grants. They are penalized for being entrepreneurial, e.g., they are not reimbursed for travel, they are not excused for entrepreneurial work. often they are not allowed to mix granted work with tech transfer. Many universities are following policy established many years ago that has not kept up with the rhetoric of forward thinking Presidents. This has a lot to do with public funding – making sure that the tax payers are not subsidizing private enterprise. This can be overcome. New policies must be developed.

Response—I don’t believe there are problems with institutional charters, etc. The commercialization boogey-man is often seen as within the large research institution. Frankly, most research institutions are happy to transfer their technology. So having a “sender” is not the problem. The problem is having a viable, credible “receiver”. Most small to medium size business are clueless and very unsophisticated about working with extremely early stage technology. And so

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they mostly fail. The blame always goes to the “big-boy” – the impersonal research institution. This story needs to get corrected and turned around. What is impeding the flow of technology into commercial enterprise is funding to mature the technologies into product-ready form and management teams who can turn that product into a viable business. Those are not research institution problems – they are what every technology transfer office wishes they had a lot more of to work with.

Response—The state of Washington does not allow public higher education institutions and state agencies to take equity in companies. Lending of the state’s credit laws limit the ability of state government to provide assistance to entrepreneurs. Both laws need to be examined and revamped to accommodate a more flexible approach to working with innovators. An appropriate action may be to develop a policy paper (or series of papers) that analyzes the impact of the current laws and the benefits of changing the laws as a basis for recruiting legislators who can champion changes in the laws.

Research Institution Culture (Survey 4-Technology Commercialization)

Culture in a research institution can have a major impact on commercialization. This includes the degree to which principal investigators are encouraged to consult with industry or to participate in startup ventures, as well as the perceived efforts and support of the institution in facilitating these endeavors.

Question – How supportive are our research institutions in helping to commercialize technologies developed by their principal investigators? What aspects of their culture could be improved to better help with commercialization? What actions would you recommend? Which are the most important actions? What will be our biggest obstacles?

Response—Not very. We need a whole new paradigm, from the taxpayers up to the Boards of Regents, to allow entrepreneurial investigators to profit from their ideas. The schools need to attach funding to tech transfer programs, and they need to support the faculty that show entrepreneurial successes. Obstacles are the slacker professors (and there are many) who would fight university funding going to a colleague who was using university assets to start a company. Taxpayers have to be educated to see how their dollars are helping the economy in new ways (some don’t even appreciate yet that education, in general, helps the economy)

Response—See response above. Certainly there is always room to improve any organization’s processes and procedures, but the vision you have will not be realized by focusing on institutional cultures and attempts to change them. Wrong problem. (Response Above – I don’t believe there are problems with institutional charters, etc. The commercialization boogey-man is often seen as within the large research institution. Frankly, most research institutions are happy to transfer their technology. So having a “sender” is not the problem. The problem is having a viable, credible “receiver”. Most small to medium size business are clueless and very unsophisticated about working with extremely early stage technology. And so they mostly fail. The blame always goes to the “big-boy” – the impersonal research institution. This story needs to get corrected and turned around. What is impeding the flow of technology into commercial enterprise is funding to mature the technologies into product-ready form and management teams who can turn that product into a viable business. Those are not research institution problems – they are what every technology transfer office wishes they had a lot more of to work with.

Response—Eastern Washington universities, by and large, do not have policies and tenure practices that support commercial entrepreneurship. Unless there are convincing reasons to do otherwise, or unless leadership believes and communicates clear support for entrepreneurship, the academic culture will remain status quo. Suggested actions are to provide concrete examples of the benefits to the institution (ranging from student employment to corporate gifting) and surrounding region of faculty involvement in entrepreneurship, using either local or national success stories.

Commercialization Capabilities (Survey 4-Technology Commercialization)

Moving innovative technologies from the lab to the marketplace is not a trivial task, particularly with large research organizations. Establishing workable partnerships and providing linkages to entrepreneurial resources, risk capital and talent is critical for success. In our region we have organizations such as PNNL, SIRT, WTC and the Idaho Technology Transfer Center that help with various aspects of commercialization.

Question – What are the most promising opportunities or potential initiatives for us to strategically expand our commercialization capabilities throughout the region? What actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—We need a loaned executive program where an experienced CEO can get paid while he starts a business for a scientist. We'd tried all sorts of advice and assistance programs, but none work so well as one guy being paid to get the job done (or started). For instance, the organization could pay an executive \$50,000 to spend 6-8 months getting a company started. The successful company would pay the \$50,000 back over 2-5 years.

Response—Today's world, and even more so tomorrow's, reflects incredibly more complex science and technology being imbedded into every product and service. Technology transfer used to be a process of licensing one or two patents to an entrepreneur or some major business. Now, however, the trend is to license large suites of intellectual property in a single transaction. The most promising opportunity we have is the ability to bundle IP from multiple research institutions into high value commercialization transactions. Being able to do so AND have that commercialization occur within the region would be a huge economic benefit. This will require lots of cooperation, lots of strategic thinking, lots of business acumen, and lots of patience. But the tools exist to this meaningfully if we are so inclined.

Response—An immediate opportunity lies within the NSF proposal submitted in May 2002 by an EWU- and SIRT-led consortium in response to the Partnerships for Innovation program. If funded, the project would be launched in January 2003 and create a partnership commercialization model that convenes several public and private entities around a common vision to build a technology-based, regional economy.

Key components of the project are to create a web-facilitated process for submitting and assessing invention ideas; a database of technical and business experts for reviewing ideas; venues for marketing technologies to interested parties; and student internships throughout the project to provide them a direct learning experience. Specific activities would include (1) a survey of academic, government and business people for the expert database, (2) definition and implementation of the technology assessment model, (3) promotion of the model to faculty, (4) technology marketing and trend analysis, (5) establishing and communicating internship opportunities, and (6) creating a website to promote and provide access to all of the above.

K-12 Education (Survey 5-Human Capital)

Our ability to build an exceptional workforce is anchored in the quality of our K-12 education. Of particular interest is our ability to achieve both excellence in teaching and increasing levels of student proficiency in core subjects such as mathematics, science, computer literacy and English. Improvements in our regional K-12 efforts have been significant and include the development of high academic standards and assessment methodologies.

Question – Are we adequately preparing our K-12 students to take advantage of opportunities in an economy driven by innovation? What specifically could we do better? What are the most important actions we can take? What will be our biggest obstacles?

Response—No, we are doing an average to below average job when it comes to preparing our kids for the opportunities of the high tech world. Kids today do not understand the opportunities in high tech. They do not understand the preparation it takes, especially in mathematics, science, and critical thinking skills. We as teachers, parents, and administrators, need to raise the bar of expectations. We should not be trying to find ways to make things easier for our kids. We should be focusing on teaching our kids critical thinking, and showing them the possibilities of the high tech world.

We need to focus on staying on the leading edge of technology. This includes constantly upgrading the curriculum and lesson plans. Guidance and career counselors need to realize that kids need to have more choices, not just a single path to go down. Flexibility in the innovation economy is key, and counselors need to recognize kids are not all the same.

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The idea of dual paths needs to be put into the minds of counselors and educators. There should be accelerated math and science classes for those kids who excel in those subjects. There needs to be opportunity for self-guided instruction, computer instruction, self-paced classes, and remote and distance learning.

Educators need to be self-critical in order to go down the path of constant improvement. Collaborate with business in order to find out what they need to prepare the kids for. Challenge themselves to be better and more innovative with the content and teaching methodology. Success does not come by just standing around doing the same things.

Obstacles, which need to be overcome, are the clinging to tradition and traditional methods, and the resistance to change. There is an unwillingness to take risk, even if it is appropriate. Kids need to be thought about differently, not in terms of abilities, but in terms of ways of learning. Kids have become more adept to technology and have outgrown the teachers. The teachers must now do the catching up.

Response—Spokane has opportunities for students that are both very progressive and very exciting. However, there are many students who are still not being prepared for the “innovation economy”. This occurs for generally one of two reasons. Either the students are not ready to learn in a new way or the teachers are not ready to update their methodologies to meet this new day and age.

Students can be motivated to learn in a number of ways. Regardless of the content or the setting, students have always learned. The difference more often than not between students who learn and who do not is how the content is presented. If students are fed data to recite back in a “data-download” fashion they are going to be less interested than if they are able to interact with the content and “live it” in some way. Teachers or facilitators that can help students to really interact with the content are able to bring some of even the driest content to life.

Keeping this in mind, the ability to provide students a hands-on learning environment is imperative. These opportunities can range from simulated interaction with business to direct interaction in a business but provide a wealth of experience for the student both in their area of content as well as in general problem solving, interpersonal relationships and contextual thinking.

We are beginning to do this well and with the reforms going on at OSPI in the vocational education area there will be more improvement. However, the key variable in any successful endeavor of this sort is community involvement. Teachers are not motivated to use this teaching style if they do not feel supported by the business community and students are not interested in it unless they are actually gaining valuable experience. It really is a process that needs to be grown organically in a community through gaining vocal supporters within the community and some initial success that can be publicized. Many people will not be involved unless they see it works or until they can somehow assess the value of the program through previous results.

Response—No. Greater need for studies in science, math and capitalism/economics. Suggest more specialized programs like “high-tech high school. Biggest obstacles include resistance to change and funding.

Response—Well I have some experience in this area. The various school districts do compete. We have had a challenge to coordinate and create collaborations. Also, skills based or tech-prep training is under funded and focuses on old-economy industries.

What we need to do is to build more cooperative models such as the Skills Centers but for the innovation economy. We can also benefit from the development of more running start programs that get student to college quicker and with more relevant skills.

So I think the biggest obstacles are inter-district competition, lack of tech-prep for the innovation economy and few successful running start programs

Response—

Science/math are still great challenges even though a lot is going on to improve the problems in these areas. Districts lacking the money are falling behind in technology, and therefore not offering the most advantageous curriculum. Resources, such as money, are vital to the successfulness of the school. Parental involvement is also a key element as to how far a child will go in school.

Programs offering higher level math and science classes, at a younger age, will create opportunities for kids to excel at a younger age, and therefore prepare them for higher education.

Pre-school and full-day kindergarten programs for under-privileged kids need to be implemented in order to start and keep them at the same level as their peers who have more resources to use.

Response—Progress is being made to get students the skills to succeed in our knowledge era. Innovation is a challenge that is too often overlooked and the structure of schooling works against rewarding innovation; the old system rewarded compliance and rule following, both of which are good virtues unless to literally followed! We certainly are not at the goal of 90% plus of our students reading, writing and doing math at standard.

Specific actions require sustaining the focus on improvement, keeping high expectations in place and reinforcement from business and higher ed that this work is essential as a foundation for the future success of each child and our communities.

Resources are a challenge, but the mental models people hold for what school should be like are even more problematic. Everyone went to school and thinks it should look like what they experienced; this creates resistance to change and blocks some improvements. Extended school year, professional development, community based learning and public support are among our big challenges.

Response—Since Science and Math are at the core of innovation and technology, we need to change the way we teach children and increase the graduation requirements for Science and Math. Also, since all people do not learn in the same way we should seek improved techniques for teaching Science and Math in order to get more kids interested in these subjects.

Changing the mindset of the existing education professionals may be the biggest obstacle. An effective study and a campaign which will include people from the education sector may be the best strategy for changing the mindset and the teaching style within the current academic community in our region.

Higher Education (Survey 5-Human Capital)

Innovation generally happens in waves. Of particular import to an innovation economy are those individuals with the education, skills and aptitude to either create or amplify these waves of innovation. As the development of the initial pools of business and technical talent largely occurs via institutions of higher learning, their degree programs and curriculum in innovation-enabling areas such as science, engineering & entrepreneurship is critical.

Question – What specific actions can we take to grow the curriculum, degree programs and number of graduates in key areas such as science and engineering at our institutions of higher learning? Which are the most important actions? What will be our biggest obstacles?

Response—Colleges and universities in general need to change their culture. They need to be more responsive and prone to action in the development, redevelopment, and redesign of curriculum.

Partner with the business industry more closely in order to know the demands and skills that are needed in terms of technology. The businesses know more about what is needed and wanted in the “real” world. Education institutions need to understand this and teach what the business world is using and needing.

There needs to be more of an increase in focus on research and the commercialization of research. More incentives for the increase of commercialization of research need to be offered. This may include some sharing of intellectual property rights to a greater degree than we are used to, but it will bring more success than each party working for themselves.

It is essential that we encourage partnership among the universities and colleges as well as with the private sector and other organizations that can help with technology. By creating partnerships, we can help ensure that the faculty has real world business experience and is teaching application and not just theory.

Overcoming traditional thinking is necessary in order to make any progress. There is a lack of risk taking and visionary thinking, which leads to lack of success. Academic arrogance is what is keeping our educational institutions from teaching what is needed.

Response—Currently in this region, my experience in talking with faculty and staff is that in some fields we have an abundance of students and a lack of opportunity. In these fields we are turning out some of the highest quality students but are losing them almost immediately because we do not have the infrastructure and jobs to retain them locally.

Having said that, I believe that at certain institutions the programs and curriculum need to be evaluated based upon

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their contemporary value. There is significant value in teaching the theory behind different concepts but without a way to apply these theories in a meaningful way, they really are very useless. One example would be students who are in web-design courses yet have no idea how to publish a web page. They can be taught the basics of HTML, Design and any variety of topics however without the knowledge of how to integrate them into an actual web page there is not a lot of application for them. Additionally, there are not a lot of companies that are interested in bringing kids inside to get experience who do not know at least at a basic level what the “big picture” looks like. This creates a bit of a cycle because the businesses do not feel the local talent is ready and then the local talent does not get the necessary experience and on and on.

Response—This is a very complex problem. WSU-Spokane is limited in what it can offer due to the influence of the Higher Education Leadership Council. I would refer you to the WSU-Spokane strategic plan, pages 7-8 for a more in-depth discussion of the barriers they confront. In general they cannot simply choose to offer Ph. D. programs in any discipline that they choose, however, they clearly state that they are committed to increasing the capacity for applied research at the higher education campus.

To increase the capacity of research in the appropriate scientific areas will require 20-30 FTEs. This will require significant investments in infrastructure (wet labs, instrumentation and computing) as well as require new policies surrounding faculty entrepreneurship and technology transfer. The latter is required because recruiting the very best will require competing against other academic centers that foster faculty entrepreneurship. It will also require a sizeable sum of money for direct costs and salary.

We are particularly challenged in that Gonzaga, Whitworth and even EWU are not level one research universities. WSU (Pullman) is not a level one research university but I was heartened to hear Rick Frisch, the new President of the WSU Foundation state that it was his goal to raise the necessary funding to raise WSU to the level one capability.

So, the most important actions would be to create a college of applied bioscience at the higher ed campus, to fund the addition of 20-30 FTEs for research and to alter the policies for faculty entrepreneurship and technology transfer. The greatest barriers will be the HELC, the legislature and the absence of funding.

Response—When you get kids on the right track early, these things will come! There needs to more consistency in the WASL test, which is administered in high school, and the SAT and ACT tests, which are college entrance exams.

More practical and applied math and science needs to be taught, rather than the theories. Theories are not used in real life, application is. Technology is changing every day, and we need to teach these new technologies in order to keep students interested.

Response—We have strong education programs and a deep applicant pool for most of our human resources needs. We are limited on diversity, however. We need to build and expand the diversity of our applicant pool and that means that the schools of education need more diversity in their student body. We’ve worked to align our high school students into coordinated programs so they might become future teachers (Future Teachers of Color program). This is a long term issue but one that weakens the strength of our programs for all students, given that our young people will be living in an even more diverse society than now exists.

Response—I don’t believe this is the main challenge we face; I believe the biggest challenge is creating the demand for more engineers while also growing the curriculum and degree programs at the higher education institutions.

A stronger relationship between industry and education seems to be the best option for educational institutions meeting the demand for engineering and science talent a region will need. If jobs are available and research and commercialization is happening via technology transfer, private industry and the education sector will be closely linked as both with feed off of each other.

Focused Training (Survey 5-Human Capital)

A key element of the innovation economy is our ability to recycle our regional human capital. As workers are displaced from one industry, there exist opportunities to re-skill them for emerging industries. Further, a key to maintaining our competitive edge is our ability to keep the skills of our workers current through workplace training and continuing education.

Question – What are the most promising opportunities or specific initiatives for us to strategically grow our focused training capabilities through workforce retraining programs, workplace training and continuing education? What actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—Biotechnology and biomedical technology initiatives are showing a great deal of promise. Special training in energy is an up and coming project. In the IT sector there is HIPAA opportunities, network and cyber security, as well as wireless communication.

We should be focusing on the areas of need, and exploiting and developing the opportunities that lie in those areas. Another area of focus would be the emerging technologies. These technologies are the future and we need to take advantage of what they offer. We also need to concentrate on training for entrepreneurial startups. These startups are the companies of the future, and the training will be beneficial in order to create and kept these companies operating.

The general economy and lack of jobs and opportunities are obstacles standing in the way of these initiatives. Lack of assessment tools and the matching of training to appropriate candidates are also hindering economic stimulation.

Response—I am not heavily involved in the area of worker retraining however based upon my involvement with the Community Colleges of Spokane I have seen some of the beneficiaries in action. The programs seem to be having some success and the people seem genuinely grateful for the opportunity. One caution I would throw out, based upon feedback that I have received from some community members is that worker retraining is not for everyone. It is very important to consult the population who is being retrained or who is upgrading their skills because there are instances where it is not desired. As appealing as it is to train and retrain certain segments of the population in order to help them move forward in their professions or to get a “living wage” job, many people are not interested in that and are comfortable with where they are. Though the idea of providing them greater income is nice in theory, in all actuality they see themselves losing in the big picture because public services for them would be reduced as income increases. (Public assistance, food-stamps, etc.),

Response— Need for INTEC to remain focused on the critical task and for continued funding.

Response—This is also a complex problem. Attempting to time the supply of appropriately skilled workers with the demand is very difficult and the current systems to do so operate in silos. I think we have done a great disservice to the workforce because we have fundamentally failed on the demand side. A world-class workforce development system does not confer (in isolation) competitive advantage. The competitive advantage is derived from the coordination of this system with effective economic development strategies that insure a continuous demand for knowledge workers across several disciplines representing a diversified economy.

The basic problem is that the system that delivers skilled workers is remarkably different from the market it serves. In the innovation economy rapid change is the rule, but change within higher education is more gradual. This disequilibrium leads to the supply shortages that we currently face.

What is the solution? I believe that the markets will dictate. Universities that have a teaching focus will begin to deliver SKILLED workers or they won't have enrollments. The same will go for Community Colleges. We need to assist them to adopt relevant training (the INTEC model) and we need to encourage innovation and risk taking. I think that the FTE based economic model that drives higher ed in this state needs to be refined to take into consideration the necessity for innovation and risk and this is markedly different than building and sustaining programs that guarantee enrollments.

I also think that the workforce retraining systems are equally poorly designed. A displaced worker can only be given training for a job opportunity that is certain. Further more, the training can only be conducted so as to be completed prior to the lapse of unemployment benefits. This limits innovation and programs that take longer, but may be hold the skills necessary for reemployment and career migration (ie nursing for example).

Finally, I think the whole model of workforce development needs to be rethought. To many of the systems are deeply entrenched in tradition. The world has dramatically changed and these systems need to change to adapt to the new world.

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Response—One strategy of INTEC is to better match industry needs to the available training. Training needs to be viable and usable in industry, otherwise no jobs are created. A company cannot hire a person who has had the training, but cannot perform the work.

Colleges, universities, and technical preparatory schools need to partner and collaborate to eliminate the perception that technical training is not a form of higher education. These collaborations can lead to better job placement after training. College is a great way of education, but it is not the only method, technical training is as acceptable as college, and it may be the only thing that works for an individual.

Response—All of us need skills and experiences in the change process. Our systems often see resistance to change as a reason to stay the way we've been. Creating more comfort with change, embracing it and learning to live in the questions and the changes is a big challenge. The role of leadership is important. People simply don't trust the benefits of change and that blocks innovation.

We need to build expanded awareness and capacity to think about and lead effect change processes. These programs can work if we do them well and involve the affected people in the process.

Response—INTEC and other local organization working in collaboration will be the most promising initiative to focus on re-training and workforce development initiatives. All organizations should work hard to provide continuing education in each particular field. Various regional organizations like INTEC can provide the data necessary to keep the companies current with the latest technologies that are in demand as well.

Other organizations like WorkSource and Career Path Services are available to work with displaced workers and should work closely with INTEC to stay up on the in demand areas as well.

Recruitment and Retention (Survey 5-Human Capital)

An important element of the innovation economy is our ability to recruit world-class talent to our region. Potential areas of focus for recruiting efforts include scientific, technical, intellectual, management, entrepreneurial and financial talent. Once these individuals reside in our region, we need to ensure that they have viable employment options and convincing reasons to stay.

Question – What can we do better in the key areas of recruitment and retention? What specific actions can we take to achieve greater levels of success? Which are the most important actions? What will be our biggest obstacles?

Response—It is essential that we develop a critical mass of opportunities and workers. We need to change the perception of Spokane to a place for technology and technologists. The environment must be transformed to be conducive for technology particularly in the areas of housing, shopping, jobs, and also be more self-contained. We should build on our colleges and universities as key links to intellectual capital and as stimulation to bring this intellectual capital into Spokane.

It is necessary to have collaboration and a shared vision. Working together creatively and with a positive sense of determination will facilitate the development of an infrastructure. This can only lead to a greater number of workers and opportunities for those workers.

Traditional thinking and a “can't do” attitude will impede the collaboration process. Infighting and turf battles are limit progress, which in turn will not benefit the people we are trying to help. Lack of perspective and vision are also key obstacles to conquer.

Response—Recruiting and retention of key talent are very important to our area. However, the biggest issue again is the ability to provide them with the necessary jobs. In comparison to other similar cities, Spokane has limited innovation. One cause of this is potentially a shortage of mentors skilled at working in an “innovation economy”. The business climate in Spokane has not historically demonstrated significant ongoing innovation. While successes exist, there are not many people within the community that are dedicated to integrating the existing (or imported) talent into our technical, management, or entrepreneurial environments.

Without integrating this talent into growing and innovative environments it is a waste. If this talent is recruited locally and then stifled in what some consider the “Spokane way” then there is not any sense in recruiting it. Said a different way, if people are brought to town under the premise of being innovative or producing change, and we insist that things stay the way they have always been we are wasting their time. This has been a pattern that has shown itself on a

somewhat regular basis and that needs to be changed. If we are not willing to accept as a community what these people have to offer and sacrifice to keep them, then we will not be successful in retaining them. You cannot support innovation and creativity as well as insist on preserving the status quo. There is a fundamental conflict in that. While not everything needs to change, and change does not necessarily need to be dramatic; it is necessary.

Response—Not sure we can ever be successful in recruiting talent without first demonstrating abundant opportunities for employment.

Response—I will address the bioscience cluster. First we need to reform the system of medicare reimbursement so that WA is not ranked 42nd of the 52 states. This leads to significantly lower reimbursements leading to retention problems and recruitment problems. If we want the very best talent to do applied research, we need the very best clinicians to have them collaborate with.

We need to invest in the necessary infrastructure; labs, instruments, world-class computational power and specialized support staff to meet their needs. We need a diverse community so that people with diverse cultures and belief systems can feel safe and welcomed. We need a new open intellectualism that stimulates and distinguishes our community and invites thought leaders to want to be here.

We need to profoundly alter the rules associated with the transfer of technology and faculty entrepreneurship. If we do not we will not recruit the very best talent as they will seek alternative settings that meet their needs for opportunity and wealth generation. We also need to encourage the transfer of technology to local companies so that job creation and the resultant economic impact are felt locally.

Finally, we need to acknowledge that we are behind in the game, that to get in the game will require courage, quantum resources, collaboration and a willingness to risk. These are things that I think our community has struggled with for too long. The old issues of turf, and security in the old ways, will plague us if we don't accept the new realities of the new economy and it's global dimensions.

Response—There are mixed messages being sent. The old way of recruitment was to bring in new companies with higher paying jobs. We do not have the tax offerings to bring in companies from other locations. However, there is an idea that the companies already in the community could pay higher wages. It needs to be decided what will benefit the economy the most and start implementing that plan.

The quality of life is important to the people who live here, but settling for lower wages should not be a consequence.

Response—

Quality of jobs is important. We need higher paying work that is challenging and offers people a way to be involved in the mission behind the work.

Quality of life is good but only if we grow and keep growing.

Create a mindset of progress and use of our natural assets and tools; transportation is good, recreation opportunities, work ethic is high. Build on these strengths.

Response—We need to work closely with SIRT and other regional networking groups to build more collaboration and relationships in sectors like Wireless Technologies, Cyber-Security Technologies, Healthcare IT, Bio-Sciences and Software Development. Building these relationships will help people network with others from their own field creating a stronger personal network for each and a stringer recruitment tool for companies and the EDC.

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Current Digital Infrastructure (Survey 6-Digital Infrastructure)

A metropolitan-area network (MAN) throughout the “Triangle of Innovation” region would enable advanced capabilities for those who live and work here. It would allow high-bandwidth connectivity between hospitals, universities, K-12 institutions, businesses, retail establishments, government agencies, residents and others.

Question – From the backbone to the last mile, what level of digital infrastructure do we already have in place in our region? How does this compare to other regions? How available is this existing network geographically? What are our biggest obstacles to using it on a greater scale?

Response—Having been in the telecom industry for many years I can tell you there is a tremendous amount of Fiber Optic infrastructure in place in the region. With respect to Spokane and CDA we have are sitting on a large amount of capacity. Certainly higher than most markets our size. As far as the last mile however that still remains to be majority owned by the Bell Operating Companies (Qwest and Verizon) in our region.

The largest obstacles to further development are financial resources. The only way Grant County got fiber optic to the home and or last mile was because utility ratepayers paid it for. I have built several fiber optic communications companies and spent much time in NY with Wall Street investors and I can tell you there is no return on investment in building fiber to the home. Once again Grant County did it with ratepayer money.

Response—Our digital infrastructure is as advanced if not more so than other metropolitan areas in the nation. We have 170-180 miles of fiber throughout the city, 140 buildings on our fiber, including big, multi-tenant buildings. The fiber goes out to Liberty lake, spotted road, east to group health, out Sprague and in on Trent. In short, we have great wire in town, greater per capita than both Seattle and Portland.

Potential Digital Infrastructure (Survey 6-Digital Infrastructure)

A powerful prospect for developing a regional advantage lies in the possibility of creating a next generation MAN in our region enabling advanced voice, video and data capabilities (similar to the ZIPP network in Grant County). This network would consist not only of the technology, media and switching equipment, but also a sound operational strategy to ensure that the strategic objectives and financial goals of the network are achieved.

Question – In an ideal world, what would a next generation MAN for our region look like? Given likely constraints, what tradeoffs would you be willing to make? What would be the scope of the network? How far would its capabilities extend?

Response—IP NETWORK, voice as we know it today is dead. The future is IP.

The most economical and cost effective MAN that we could build in this market would be a combination of a Fiber Optic backbone which exists today and utilizing copper or wireless facilities to reach the last mile. People will tell you that everyone needs fiber to the home and that is the only way to go. Don't get me wrong it is the perfect way to go but it is not economically feasible.

We could take the existing Fiber networks today and develop an IP based Network that would compete with any network in the US.

Response—Hooking homes up to the fiber is hard to do with the stock prices plummeting. It is simple too expensive to hook homes up and make the cost reasonable. Fiber is too fast for homes and too advanced for the general public to make use of. We need to start with the backbone and then decide where to go from there and how to link to everything.

Digital Infrastructure Strategy (Survey 6-Digital Infrastructure)

Creation of a viable digital infrastructure within a geographic region or metropolitan area has proved exceptionally difficult to achieve. The reasons are multiple and include: the total cost to design and build, ownership of the network, network operations structure, profit & loss sharing, access strategy, pricing of services and more.

Question – Given the difficulties of creating a successful MAN, what would be our optimal strategy for achieving it? What would be the best approach to fund the network? What actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—The right leadership and experience is very key. This will also become a problem because not everyone will agree with the vision.

Look to Government and State Funding. The private financial markets will not fund this project.

Response—“The amount of cable is a secondary issue, Washington’s business tax is Unfriendly” What we can do to help is offer waivers for startups and offer some sort of financial incentive to young businesses. We need to stop worrying about the amount of cable and change the oppression from the state

Entrepreneurial Networks (Survey 7-Entrepreneurial Capabilities)

Networks of relationships are crucial to the success of startup companies. These networks include: mentor networks – successful entrepreneurs who share their wisdom; peer networks – fellow entrepreneurs who share their insights; and enabler networks – the extended team of lawyers, accountants, headhunters, consultants and others who facilitate transactions, make things happen and contribute heavily to the progress of the startup.

Question – What opportunities exist to grow and strengthen our entrepreneurial networks? How can we better plug our aspiring entrepreneurs, researchers and startup management teams into these networks? What actions should we take? Which are most important? What will be our biggest obstacles?

Response—

I think many qualified people are willing to help (pro bono) some there is no real arguing process to provide depth and continuity. Again, no money to do so.

Response—We started our company, Mabuhay Networks, mostly with contacts that are not from this area. It was fortunate for us that we had Mabuhay Networks people with wide ranging contacts. The areas where aspiring entrepreneurs are most likely to need help are:

Legal

Business plans

How to raise money

Hiring/recruiting

SIRTI should in theory be able to help in the areas listed above. SIRTI, however has a funding model that is not conducive to a startup company. An organization that can offer help in the areas above in exchange for equity (sharing some of the risk as well as the reward) would be helpful.

Response—What opportunities exist to grow and strengthen our entrepreneurial networks?

There are several: Technet, EFGN, SIRTI, BASR

How can we better plug our aspiring entrepreneurs, researchers and startup management teams into these networks?

There is a current effort to consolidate organizations and then have the existing organizations play a specific role. For example EFGN CDA chapter holds roundtable sessions for guest entrepreneurs. If they have valid business plan and meet the criteria of the “boot camp “ provided by Technet then the entrepreneur will be asked to participate in this group.

So, identification and then promotion of the correct path/organization to complete their next step of opportunity is crucial and regional. Then regional Angel investors and VC will be able to sit in and meet the entrepreneurs after the

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have been to boot camp. Knowing that they meet their criteria as a qualified entrepreneur.

What actions should we take?

Identify all regional efforts both entrepreneurial based and investor based

Develop a regional program for education, qualifying and introductions

Keep the process clean and simple- entrepreneurs need funding and investors need qualified deals.

Which are most important?

Funding and qualified deals

What will be our biggest obstacles?

Agreed upon mission/goals by all of the groups and business leaders

Response—The Inland Northwest and in particular Spokane, has a number of organizations working on developing Entrepreneurs and fostering the growth of start-up ventures. These include SIRTI, Gonzaga's Hogan Center, TechNet, EFGN, INTEC and others. These organizations provide ample opportunity for developing start-up entrepreneurs; however, what we lack is strong and readily accessible base of investment capital, an active network of volunteering, experienced, entrepreneurs to mentor these newbies, and support services that are networked together that have a meaningful start-up experience. We need a well-oiled start-up machine to attract and develop entrepreneurs, then to foster their success. In contrast, Silicon Valley has strong base of experienced entrepreneurs and mentors to serve as board members and the advisory support organizations: lawyers, accountants, banks, venture capital organizations, universities and consultants. It is a well-understood mission of these organizations and individuals to foster and mentor start-ups. As a result, it attracts entrepreneurs from all over the world. Not all of Silicon Valley's entrepreneurs are locals, rather they are talented individuals attracted to the resources of the area.

The right entrepreneurial resource organization, which is capitalized to succeed, can build a regional focal point for all the constituents. Next, a grass roots effort must take place to coordinate and educate the professionals in the region to support one-another and this effort. When the expertise does not exist, we must expand the network to include Seattle and the Valley, until we can get the talent in place here. Ten years ago Seattle had few venture capital firms represented in their region – today, they have a strong base of venture capital organizations based in Seattle, and regional offices of Silicon Valley big hitters. Experienced support organizations have established regional offices in Seattle including Venture Law Group, Wilson Sonsini, Deloitte, and others. If we get this area cooking, it will happen here. Success is infectious. We have to ensure that the current and about to be current crop of start-ups succeed. Then claim it, and use Public Relations to attract new talent to this area

Response—EFGN was created expressly to promote these types of networks. Broad support for EFGN by businesses, firms, and community organizations would help ensure development of healthier networks--breaking down the silos. An organization dedicated to helping grow businesses from the garage to the IPO, with even a modicum of paid staff, would be able to enhance those networks that already exist, but also create new ones and provide a bridge between them and a point of entry for those who are outside the networks (which includes most entrepreneurs here). SIRTI is a logical bridge to research being performed at universities and national labs. Technet is a peer-to-peer bridge between technology companies. The EDC is a bridge to companies seeking to relocate here. Other bridges include the Chamber (existing companies and enablers), the Higher Education Working Group (universities and colleges), INTEC (all levels of education, biotech, and energy companies), BASR (biotech and research), and many more. EFGN can serve as a link between these other organizations and a contact point for startups and potential entrepreneurs, to hook them into the appropriate networks and to help them negotiate the gaps in the networks. Finding funding for EFGN, assisting the organization to become formally constituted, and identifying a dynamic leader for the organization would go a long way to making much of this happen.

Even without EFGN in a leading role, much can be accomplished. The greatest potential benefit for startups would be to have a seamless web of contacts they can follow to achieve any of their goals--finding an accountant, choosing a corporate structure, protecting intellectual property, hiring management and staff, etc. Ideally all an entrepreneur should have to do is start asking questions and people anywhere in the Spokane network would point them in the right direction. This would cost nothing, other than a willingness on the part of our leaders and business people to spend a few moments now and then, without a desire for compensation, helping those who want to build the businesses of

the future. Someone would need to lead an educational campaign to make lawyers, accountants, bankers, and other professionals aware of this need and the simplicity with which it can be addressed.

The biggest obstacle to making this happen is our own indifference or lack of awareness. Someone who is respected by the business community will have to step up to the plate and make this happen, and the business community must be willing to adapt to a new way of doing business. If they do, the payoff will be spectacular.

Education & Training for Entrepreneurs (Survey 7-Entrepreneurial Capabilities)

Creating a successful business venture can be an incredibly consuming experience. The checklist of activities to accomplish – many of which require exceptional effort – is simply overwhelming. Relatively few entrepreneurs have the skills to accomplish these activities effectively. They need access to quality advice, training and education.

Question – What can we do better to provide needed education and training for our entrepreneurs and early-stage startups throughout the region? How can we better inform our regional entrepreneurs about existing training and education options? What specific actions could we take? Which are the most important? What will be our largest obstacles?

Response—The workshops, forums etc. all provide value but not to the point where it is specific enough to actually move an entrepreneur close to funding sources. An umbrella to provide seed money to do so would be great.

Response—The best training is that which is done through experience and example. Making people with experience and expertise available as consultants or as part of an incubation organization would be a great help

Response—All of these questions – I will answer in one- statement. Need to have support of regional leaders, state leaders and EDC communities of both Idaho and Washington. Top down approach is needed to have an effective regional impact. A federal grant or program would be the best choice.

Response—What can we do to recruit entrepreneurs to start ventures here in the Inland Northwest? Today that would be very difficult, we don't have an acknowledged investor base, a large workforce network of talent, and we lack incentive programs to draw these talented people to the Inland Northwest. If we simply rely on growing our own, it will be a long and difficult task to build a critical mass of start-ups. In Spokane, taking a risk on establishing a start-up means not having a regular paycheck and little hope of finding investors. This is simply not acceptable risk for most people. It is not about risk aversion for our entrepreneurs, it is certain death. To succeed, we must recruit new companies to this region by providing programs that are meaningful. To understand how this is done, I would send a delegation to the RTP and other successful regional centers of innovation. Let's emulate what they are doing to attract investment, entrepreneurs, start-ups, and talent.

To inform entrepreneurs and start-up support organizations, it is a simple grass roots effort, coupled to a consistent public relations program. To attract entrepreneurs and investors, we need to establish outreach programs into other areas, coupled with incentives to draw these talented people here. And I'm not talking about hunting and fishing opportunities! These programs cost money and if this is going to be a regional organization, then it must be funded substantially to succeed.

Response—Some of what's required is already available, through EFGN, the SBDC, AHANA, Technet, INTEC, SIRTI, and other organizations. What's lacking is a community-wide network to feed people into these existing organizations. Every organization can be a conduit into this network. It might make sense to have one organization primarily dedicated to helping startups and growth companies serve as the primary conduit, with other organizations directing entrepreneurs toward that organization, but in that case, the organization, whether it's EFGN or something else, will have to have someone on staff who can help guide the startups in the right direction. It won't happen easily with volunteers.

Another option (or a parallel track) would be to create at least one "business garden" that puts all the elements together in a single building (Silicon Valley in a box), making much of the networking easier, or a virtual incubator (funded, of course) that would perform the same objective but without a building. Here, where it may take years to develop effective and open networks, it may make more sense to go the business garden route. Everything it takes to grow a business--from planting the seed and providing space to grow, to fertilizing with staff and outside professional support and watering with money and developing markets with sunshine (to belabor the metaphor)--would be available in one location, with bridges to local expertise and outside support. The business garden could also serve as a center for

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nonaffiliated entrepreneurs to receive the training and education needed for their startups to fulfill their potential. By putting all these people together in close proximity, new ideas and great suggestions will cross-fertilize the startups, making them more successful faster than they would have been on their own.

The largest obstacle is a willingness of the community to commit to such a concept with both funding and support services, and leadership with experience in both truly successful startups and venture capital. These can both be overcome.

Entrepreneurial Culture (Survey 7-Entrepreneurial Capabilities)

Creating an entrepreneurial culture has everything to do with how we collectively view risk-taking. Do we encourage risk-taking? Do we celebrate successes? Do we tolerate failures? Are our successful entrepreneurs considered heroes? Our local press plays a very significant role in how we develop an entrepreneurial culture, including their coverage – or lack thereof – of entrepreneurial activity throughout the region.

Question – What aspects of our entrepreneurial culture could be improved? How might we better engage our local press in covering entrepreneurial activities? What specific actions should we take? Which are the most important? What will be our biggest obstacles?

Response—A completely new city council! A more business friendly and job creation atmosphere here and in Olympia!

Response—There are two parts to this answer. The first part is the culture, the second part is the regulatory and political climate.

Culture and its coverage by the local press:

The Spokane area has a culture that seems to reward the status quo and the negative aspects of our community. Our local publications are far more likely to publish stories about sports heroes than successful entrepreneurs. Very little is ever said about those who have taken great risk and achieved well deserved rewards. Very little analysis is printed about those who tried and failed and why they failed. I've read many reports questioning how wisely public officials spend public money. I've read precious few reports on entrepreneurs who have increased our tax base or created new jobs.

Political and regulatory climate:

A reasonable person might think that a community has good reasons to encourage entrepreneurial activities that create jobs and increase the wealth of the community. This encouragement needs to come not only in the form of incentives, but also in the form of removing obstacles. Mabuhay Networks, as an example, experienced different levels of obstacles as it sought the appropriate permits to build out the interior spaces in our Spokane and San Francisco offices. The permits took four weeks in Spokane. Similar permits took two weeks in San Francisco! It does not take very many two week delays to discourage a business from settling in a given area.

Our area straddles a state boundary. It should be noted that Washington and Idaho have different levels of incentives and barriers. It is generally easier to establish a business in Idaho due to simpler regulations. Mabuhay Networks started with offices in Post falls. It then moved to Spokane. The main reason is the Idaho income tax. We found that the absence of state income taxes in Washington and their presence in Idaho became a significant barrier to recruiting engineering talent into Idaho versus Washington.

Response—

What aspects of our entrepreneurial culture could be improved?

1. Educating community as to the value of developing a entrepreneurial climate
2. Creating awareness via PR campaign, newspaper, etc. That we can and do have program in place for entrepreneurs
3. Make the groups and leader develop a stream-lined process- that ultimately ends up to be an regional program

How might we better engage our local press in covering entrepreneurial activities?

1. Need to show them the “value”

Which are the most important? What will be our biggest obstacles

1. Education of the community is most important

The biggest obstacle is developing a regional effort that agrees on how to education and then what goals need to be achieved.

Response—Communications is critical here. I think most of the start-ups here get good local coverage. What is missing is a national program to get the attention of the entrepreneurial communities in other areas of innovation. We have a paucity of an entrepreneurial culture. I recently spoke at an EFGN event on a panel that included STEVE HELMBRECHT, DON BARBIERI and RANDY LONG. Given the quality of the panel, I was surprised that we had less than 40 attendees. We need some successes and we need to broadcast these successes in entrepreneurship. However, without a funding path we will never build our community. We need to create a regional venture fund to kick start new ventures. I believe this is possible if you get the universities committed. Further, I think this needs to be a single threaded event, which means a focused voice for the Inland Northwest.

We must recruit talented entrepreneurs into our area. Then we must make it safe for entrepreneurs to start companies here and provide the incentive programs and support organizations to ensure success. To succeed we must build a super regional organization to represent the greater Inland Northwest and build around this organization the talent and capital base to succeed.

Response—We frown on risk-taking. We tend to look for the dark side of any incipient success. Failure here is a one-time option. It's actively discouraged. The dominant attitude is that a bird in hand is worth a dozen in the bush; even if you have developed a foolproof trap guaranteed to catch the full dozen, you would be discouraged from giving up that one bird in hand. Our successful entrepreneurs are basically ignored by the press, possibly because few local reporters really understand business, and partly because of a tendency to believe that negative news sells better. This isn't to promote a Pollyanna attitude, but why would a newspaper give top billing to a tiny company that reports a loss over a successful technology company that has its best quarter ever, in a listing of quarterly results?

There are enough startups and growth companies in the region to fill at least two pages a week of the Spokesman-Review's business section. Other papers with a longer time horizon could easily produce regular features on startups and the culture of entrepreneurship in the area. If they're not covering this adequately now, perhaps the solution is in the creation of a PR program for entrepreneurship, placing and shaping stories the help reframe our attitude toward startups and growth businesses, addressing the problem of lack of awareness, and pointing out the very real success stories that surround us. This has to be led by someone who knows what the press is looking for and how to get them to see the potential of such stories to sell advertising. The dense network of relationships addressed in earlier questions could also go a long way toward seeding stories--the more times an editor hears about a great company or an unusual initiative, the more likely that publication will cover the story.

Perhaps a short-term fix would be to get the local editors and program managers together with leaders who can present to them a focused set of suggestions for promoting this kind of coverage.

The biggest obstacle is resistance in the media to covering these issues and an actual inability to cover the issues. The inability to cover the issues (because of a lack of interest or education in business on the part of reporters and editors) can be addressed by informal educational efforts and a PR campaign that makes the subject clearly interesting. Resistance will be more difficult to overcome, unless it's based on the lack of interest and business savvy.

Survey Responses

Process for Changing Our Regional Image (Survey 8-Regional Image)

Negative perceptions of our region include: mediocre economy, business backwater, lack of diversity, lack of tolerance, parochialism, and regional infighting. We tend to compete on the basis of cheap land, cheap labor, great recreation and “a wonderful place to raise a family”. And yet we do have intense innovation, surging entrepreneurial activity, exceptional talent and a collective desire to improve our status.

Question – What process would you recommend that we follow to effectively change the image of our region? Will there be any difference in this process between the internal audience and the external audience? What actions should we take? Which are most important? What will be our biggest obstacles?

Response—You’ll need a strategic branding process that will intelligently present the competitive advantages of the region. The process needs to culminate in communication tools that create an image that rivals the top areas in the nation. From our experience, the biggest challenge will be to get agreement from three vastly different groups.

Response—Frankly, the biggest problem I have experienced over the last 20 years is the conservative mindset of Spokane business people. We are cheap and scared to take risks. People are tight with spending money on creating perceptions through marketing and other promotional sources. We could change the image of Spokane by changing the way people think about the area with an intense sustained campaign promoting our area with strong visual messages based on sound marketing strategy and PR efforts. Whenever I have seen this attempted in the past, it has been done on the cheap. Therefore, it sends a message that we are cheap and second class. If Spokane would show up wearing an Armani suit speaking intellectually and appearing to be smart, strong, powerful, hip and progressive, it would change the mindset of our community business people and others who see us as cheap and second class.

It really seems to be hard to find many business people who believe this would help even though we all respond to visual perception everyday. If I drive up to the new car lot in my Suburban, it is not long before the salesperson is speaking to me and taking me seriously as a potential new car buyer. If I drive up in my old broken down pickup, I just don’t look like I could afford a new car - especially if I’m wearing old dirty clothes. If I valet park, I get top service in the Suburban as they think they will get a bigger tip. People do judge by appearances and impressions. What we say and how we look makes a huge difference in how people judge us - regardless if we like it or not. If I show up sounding smart with a modern haircut, Gargoyle sunglasses, an Armani suit and driving a new Jaguar, people will think I am smart and successful. This will open doors for me and provide opportunities. People will perceive (and therefore believe) that I’m smart and will listen to what I have to say and offer. And if I can fulfill the expectations I set as others judge me by my appearance, then we all win.

It is really quite simple. But it does cost a lot of money to project a successful first-class image. How do we find funding to create a new image for Spokane and the area? If we could do it I am confident you would see a real change in attitude and perception of business people in Spokane and other communities. Businesses considering relocation will look at Spokane differently. We will get more attention and the right attention. We can change the Spokane area but I believe it will never happen without a new image that is carefully designed, controlled and monitored.

Brand Attributes & Strategy (Survey 8-Regional Image)

Imagine that we have very significant goals for revamping the image of our entire region: employees strongly associate with working here; businesses are very proud to be located here; outside companies feel powerfully drawn to relocate to our region; the media recognizes our entrepreneurial brawn; and we work together to accomplish a bold vision for our region.

Question – What attributes would you recommend as highly desirable to associate with our region, in the spirit of accomplishing our objectives? What approach should we therefore take in creating an effective and visible regional brand? What specific actions could we take? Which are the most important? What will be our largest obstacles?

Response—A highly skilled work force, quality of life, technology infrastructure, tax relief, and a real desire to become a regional economic powerhouse.

Response—We need to conduct market research before I can respond with a comprehensive answer. Off the cuff I’d say we have:

- A vibrant downtown that is continuing to grow
- Not a lot of traffic

- Great schools
- Low crime
- Friendly people who care about others
- Great affordable golf courses
- Lots of beautiful lakes
- Beautiful country
- Riverfront Park and Manito Park
- Lake Coeur d' Alene
- Mt. Spokane
- Great affordable ski resorts nearby
- International airport
- The MAC
- Gonzaga, Whitworth, EWU, WSU

To convey the right image of our area, the right group must be hired to create this brand. We need a sound marketing plan, focused on strategy and results, that drives the visual image. The real trick is finding the right group that will deliver the right plan and tools to do this. The greatest obstacle will likely be finding the dollars to pay for it, then giving the creative group the freedom to be the experts. Developing the right image can ONLY be accomplished by hiring proven competent, skilled experts. It cannot be done on the cheap. I have seen it tried and it ALWAYS falls short. There are many marketing, advertising and design groups that claim they could do a great job on this effort but there are only a few I would trust to really pull it off.

Response— Walt Worthy, Williams, Cowles, Sandifur, Lewis & Clark

Lakes nearby – How many ?? aspects do we have in our media

Let's talk about the positives

Quality of life – Educational Institutions & proximity to Seattle – retail options – inexpensive – great workforce
– Quality of life is a big deal

Opposite – 1) difficulty of ?? – more flights 2) additional employment options

Positioning (Survey 8-Regional Image)

Other regions and metropolitan areas have achieved a high level of success in creating a regional image that has proven very attractive for creative workers and technology companies. The image is not just one of technical prowess, but of also having the lifestyle factors and cultural amenities in which exceptionally talented and innovative individuals can thrive.

Question – How should we position the region of the “Triangle of Innovation” relative to other geographies and regions? How should we successfully differentiate ourselves? What specific actions should we take? Which are the most important? What will be our biggest obstacles?

Response—We live in a truly unique region of the country that offers an exceptional quality of life. My company has made a living creating web and CD based communication tools that highlight the quality of life advantages in our region. Climate, recreation, diversity, cost of living, healthcare, education, are just of the few factors that we focus on.

Response—I don't have a real good understanding of the “Triangle of Innovation.” Including the Tri-Cities seems like a stretch because it's more difficult to brand a larger region. I doubt that others recognize the Tri-Cities as part of the Inland Northwest. It would be important for me (and the region) to understand why you have included these cities. I don't think I know enough about this plan to give you much input.

However, I do know that we need to focus on the positives - Spokane is growing and we have lots to offer people who are tired of the rat-race in larger cities. Quality of life - awesome outdoors and universities - great place to raise a family - ability to purchase a home - these factors are strong selling messages that we don't take advantage of good enough. Boise is thriving - smaller cities are competing with us because they have a brand and positive image.

Overcoming our own negativity about Spokane is our greatest obstacle. We need to stop bad-mouthing our city and be proud of what we have. We need to fix the things that are in need, such as the airport - this is key to forming impressions.

Survey Responses

The specific actions are:

1. Hire a marketing/design firm to conduct research, write a plan and implement the branding strategy.
2. Commit to spending money on our brand - not solely rely on the CVB and EDC to get businesses & people into our region.
3. Measure & Monitor for success

Response—Do not try and position against someone else.

Spokane is unique – lucky to be here

You will experience much greater success – weekends, not a problem at U, other

Has someone like a Steve Helmbrecht– top quality

Great ideas will attract capital – which we have missed

Regional Cluster Strategy (Survey 9-Biosciences Cluster)

We want to encourage all innovation in our region and work to promote all entrepreneurs, startups and industries. Nevertheless, we recognize the benefits of strategically concentrating our limited resources in the support of two or possibly three specific clusters, wherein we can work together to accomplish several major initiatives.

Question – Is the potential for a “Biosciences Cluster” large enough to merit it being part of a regional cluster strategy consisting of two or possibly three clusters? What actions could we take to demonstrate this potential? Which are most important? What will be our biggest obstacles?

Response—The clusters should focus on the strengths of the individual areas as defined above.

Thus, three clusters are recommended since there is no clearly defined theme linking the three areas. The ‘important’ areas will be the ones, which can make the most money. The wealthiest companies will define the region.

Response—Yes. Bioscience in this region is widely different. It would be beneficial to concentration on the strongest science areas to begin. Too much variation will make it difficult to push the perception forward in the mind of the public and the individuals of the venture.

First, you need to educate the scientific groups to the possibilities and bring them into it with their buy-in. You need to start bringing the regional public into it as a support group for legislative support from the government. It should be a unified effort to achieve this goal.

Response—We can identify a few clusters to support. This has been done very adequately. One needs only talk with bioscience leaders or read reports of recent studies, which are all excellent. However, there is great danger in stifling any ideas and innovation that happen to not fall into the chosen clusters. One must take risk and be positive.

Response—Yes, there is large enough potential to merit a “Biosciences Cluster” in the Inland Northwest. Nationally, in 2000 there were approx. 1400 biotech companies with \$353.5 Billion in investments, revenues of \$25 Billion and employing 174,000 people. Approximately 350 biotechnology-based drugs were in clinical trials (www.bio.org <<http://www.bio.org>>). All of the drugs that are eventually approved will need to be manufactured in larger scale and there are numerous patents held by the major research centers that have neither the money nor the incentive to be commercialized. The actions listed above should be utilized but the biggest obstacle will be funding. A dollar amount that is large enough to be sustaining is required to foster new companies, actively promote collaborative research between the centers and identify new technologies. Building a biotech cluster will require significant funding, maybe \$100 Million and a long time frame, maybe 15-20 years. Anything less would be a waste of time and resources.

Response—The area needs to be larger. We need to concentrate on realistic strengths.

Basis For A Biosciences Cluster (Survey 9-Biosciences Cluster)

The foundation for a cluster can consist of one or more of a number of elements related to this field, including: research programs; established companies; promising startup companies; existing supplier networks; degree programs; globally recognized experts; world-class technology; focused risk capital; successful entrepreneurs; strong enabler network; and industry associations or consortiums that facilitate networking.

Question – In your opinion, what specific elements already exist in our region that can serve as the basis for a biosciences cluster? Which are the most important? What key elements might be considered as missing?

Response—The clusters will be based on universities (WSU & UI), research labs (PNNL), hospitals, and emerging biotech companies such as Biomedex, GenPrime, BioOrigyn etc. They are all equally important since a critical mass in all of these areas is required. If you are trying to develop a synergy among the research/clinical and commercial areas, you can't say one is more important than the other. That's like asking what's the most important vital organ in your body. The region lacks a critical mass in basic and medical research. What's missing is a first-rate research and/or medical school. You need this to drive the grant funding which will drive the whole enterprise.

Response—Universities, hospitals, private research facilities and individuals that are interested in the possibility of research in this area. Facilities, equipment and individuals that contact with patients and ethical procedures to conduct human research are very important. If a study or project cannot be tested and then translated into the benefits of the ultimate user (the human) of a discovery, then everything up to the end is worthless. Some technical expertise may be missing. It seems that Spokane has expertise in a lot of general areas but no concentration of expertise in one or two areas. We must do this in unison and not as individuals. The only way that we will accomplish anything is to work together as one. This will be very difficult as we all know, but we must work together.

Response—We must provide funding and “expert” professional services, at reduced cost, to our innovators. This does not require more studies or outside experts. It requires regional professionals getting involved with the innovators and being totally supportive and adding value to what we already have.

Inventories have already been made of our commercial and academic intellectual resources and it would be inappropriate to slight them by trying to make a list here.

Response—All of these elements exist on at least a small scale except the focused risk capital and a strong enabler network. The capital requirements go hand in hand with the enabler network. Not only are the actual dollars required for investing but also the researchers developing new technologies must work within a system that actively promotes the commercialization of those technologies. The technology transfer policies of many of the research centers must be examined as well as the local tax structure. Early seed funding must be made available to startups before later stage investors will consider the Inland Northwest.

Response—Strong regional Universities, emerging companies and a large Medical Community. At this moment, the most important is the medical community. The most important to support the future is building the technical manufacturing base.

Strategic Biosciences Initiatives (Survey 9-Biosciences Cluster)

With broad support and a cohesive strategy, we have the opportunity to create several highly significant initiatives. Unfortunately, the number of such initiatives that we will ultimately succeed in achieving is likely to be small, implying that we should carefully ensure that the initiatives we propose are the most meaningful.

Question – What are the most promising opportunities or specific initiatives for us to strategically grow our biosciences cluster? What specific actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—We need to foster what is already here. Small emerging companies need capital to realize their potential. We can't let these companies die because of lack of funding. They all have significant potential and could have a dramatic impact on the region's economy. Link the current research in the region (Tri cities, Pullman, Spokane) with commercial applications in Spokane (where the population base is located). And seek the capital necessary to grow the resulting companies. Initiatives will be useless without risk capital.

Survey Responses

Biggest obstacle is money.

Response—I think that a Cardiovascular Initiative or cluster would be the first. This would include not only cardiac but also vascular and kidney. There is tremendous history in the cardiac area for Spokane and the current level of work being done in the nephrology area as well. If this were directed to the human area of research the hospital scientist as well as the private research facilities in Spokane would be key to the development of this program. Without the link between science and the hospitals there will be no program of success. The first thinks we need to do is go with our strengths. Strengthen those strengths if they are weak in any way. An alliance must be forged and maintained between academia research, hospital research, and all others that are conducting medical research in the region.

Response—Communicate! Be positive and supportive! Provide expert professional services which add critical value! Use the existing IP and research productivity in our great region.

Response—The most promising initiative for us to focus our energies is one based on the recent study by Tripp Umbach in which the Inland Northwest Biomedical Initiative was proposed. A significant amount of time, money and energy has been invested by the local community to undertake the study. Funding will be our largest obstacle. Convincing the governing bodies of Washington and Idaho that significant investment should be made in a biomedical cluster in an already tight economy will be difficult.

Regional Cluster Strategy (Survey 10-Energy Cluster)

We want to encourage all innovation in our region and work to promote all entrepreneurs, startups and industries. Nevertheless, we recognize the benefits of strategically concentrating our limited resources in the support of two or possibly three specific clusters, wherein we can work together to accomplish several major initiatives.

Question – Is the potential for an “Energy Cluster” large enough to merit it being part of a regional cluster strategy consisting of two or possibly three clusters? What actions could we take to demonstrate this potential? Which are most important? What will be our biggest obstacles?

Response—The Spokane region has several items important to a “cluster” for energy. However, it does not have everything required for a full cluster. My view is that Spokane is a key component in the Northwest Energy Technology Cluster. (I don’t believe that even Washington State alone has all of the components, hence the definition as a NW regional cluster). The strength comes when areas like Spokane determine what their key competence in the cluster should/can be and then commit that competence to the larger group.

I believe that the expertise derived from AVISTA and its spin-off and related companies gives Spokane a strong position in the NW cluster, especially as related to transmission and distribution. It can be an important component in the NW strength which is fundamentally related to electric energy.

The most direct action to be taken is first to gain broad support for the INTEC consortium and second to build a commitment to integrating that capability into the NW energy cluster

Response—The region currently has some unique strengths in energy and energy-related technology development. Both U of I and WSU have unique expertise in energy-related disciplines – they need to continue to link and collaborate, and to develop a strong business vision to transfer technology to the private sector. PNNL, and existing technology companies, along with SIRTI and the WTC must be linked as well.

Obstacles: lack of visionary leadership at universities, “control” mentality, competition for funding.

Basis For An Energy Cluster (Survey 10-Energy Cluster)

The foundation for a cluster can consist of one or more of a number of elements related to this field, including: research programs; established companies; promising startup companies; existing supplier networks; degree programs; globally recognized experts; world-class technology; focused risk capital; successful entrepreneurs; strong enabler network; and industry associations or consortiums that facilitate networking.

Question – In your opinion, what specific elements already exist in our region that can serve as the basis for an energy cluster? Which are the most important? What key elements might be considered as missing?

Response—I think Spokane has three key elements supporting the NW energy cluster now:

1. AVISTA - not only is it a large energy utility and employer, more importantly it's a source of new ideas. From the operations of AVISTA new opportunities are uncovered that lead to new products that lead to new companies. ITRON is a great example. So is LineSoft. So is the Steam Plant facility. In addition, AVISTA is a large employer so there is already a workforce in Spokane that understands energy as an industry.

2. Telecom industry companies - in the future there will be a convergence between the telecommunications and energy industries. Spokane already has a few very innovative telecom companies (e.g. Bernard Daines' companies, XO communications, ...) One opportunity is to get these telecom companies to focus part of their effort and resource on addressing problems that have energy-system related solutions such as control of the grid or wireless control on residential and industrial end-use devices.

3. An entrepreneurial culture - Spokane has a few very successful entrepreneurs. Not all cities/areas can claim that distinction. Finding ways for these successful people to mentor the inexperienced entrepreneurs can have great benefit, not only in the energy cluster, but in all industry segments.

Response—Existing: Companies: BPA, Regional utilities, Canadian utilities, Itron, Itronix, Innovatek, Battelle, Avista Labs, Avista Advantage, Schweitzer Engineering, and many others.

- SIRTI, WTC, PNNL, Washington Energy Technology Collaborative, INTEC, WSU, U of I, U of I Research Park.

Missing: Common vision, funding, broad state gov't. support, tax incentives, strong state-driven economic development process.

Strategic Energy Initiatives (Survey 10-Energy Cluster)

With broad support and a cohesive strategy, we have the opportunity to create several highly significant initiatives. Unfortunately, the number of such initiatives that we will ultimately succeed in achieving is likely to be small, implying that we should carefully ensure that the initiatives we propose are the most meaningful.

Question – What are the most promising opportunities or specific initiatives for us to strategically grow our biosciences cluster? What specific actions should we take initially? Which are the most important? What will be our biggest obstacles?

Response—Response – I can't recommend new initiatives. Instead, I think it's important to get behind the current activities. Those activities that I know about and are important include:

- INTEC's Energy Consortium: Transmission and Distribution education is a way Spokane can distinguish itself from the rest of the energy industry and provide a great service too.

- Infrastructure for commercialization and company growth: several organizations are committed to this infrastructure (Chambers, EDCs, INTEC, SIRTI, universities). They should be encouraged to be even more focused on the result - growth of companies, employment of local people.

- Cohesive strategy - I think the activity being led by the EDC addresses this issue, but it should not go unstated. If energy is a cluster of importance for Spokane, then it deserves a strategy with explicit outcomes. It also deserves the effort to get as many people as possible behind it. Focus on the outcomes: What kind of jobs? How many? From these clear outcomes, the plan will emerge naturally.

Response—

- "Clarify" access to regional university research, including UW.

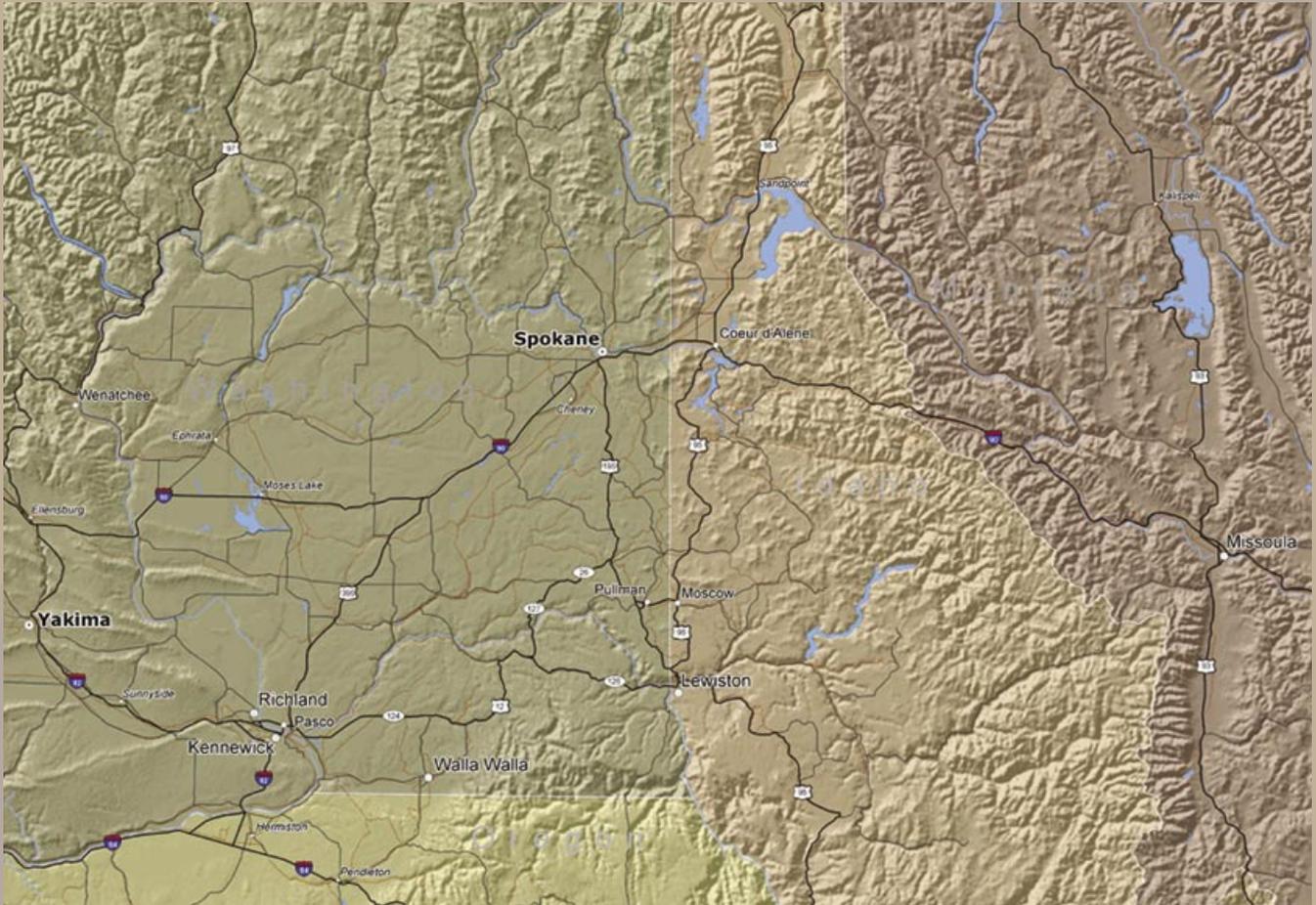
- Develop a community-wide "no turf" approach to build out wet labs, testing facilities, manufacturing facilities – all can be built on existing business.

- Coordinate Spokane City efforts to build a research park concept in/near Spokane.

- Recognize and agree on "who does what" with limited resources.

Identify incremental funding services from outside the region.

TRIANGLE OF INNOVATION



Map Courtesy of Spokane County