



Oshkosh Regional Defense Industry Diversification Initiative Survey Report

AN ANALYSIS OF THE PERSPECTIVES AND CONNECTIONS
OF THE ECONOMIC AND WORKFORCE DEVELOPMENT
ECOSYSTEMS OF EAST CENTRAL WISCONSIN

January 2015



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1.0 Introduction

The survey responses presented and analyzed here were collected during Fall 2014 as part of Future iQ Partners' work on the Regional Collaboration Charrette component of the Oshkosh Regional Defense Industry Diversification Initiative, or ORDIDI. The Initiative, which is spearheaded by the East Central Wisconsin Regional Planning Commission, is one of a number of community initiatives funded by the U.S. Department of Defense Office of Economic Adjustment. These projects are focused on addressing the impact of the reduction or expiration of significant defense manufacturing contracts through regionally collaborative industry diversification solutions.

The five-county study region included in this project, which includes Calumet, Fond du Lac, Outagamie, Waupaca, and Winnebago County represents one of the most economically-dense regions of Wisconsin. The region has also been acutely affected by the expiration of two heavy vehicle contracts awarded to the Oshkosh Corporation Defense Division. The production drawdown associated with this work has led to the elimination of approximately 1,200 direct positions, and many others throughout what is a highly integrated and locally-based supplier network. This event has placed significant strain both on the regional economy as well as the economic and workforce development ecosystems that provide vital services to support the retention and future growth of the affected firms.

The region's response to this, as well as a number of other recent mass layoff events has highlighted a number of key challenges. The first suggests that, while the region benefits from the presence of a high volume of economic and workforce development professionals and organizations, the scope of these organizations is largely constrained by externally-defined service areas. As a consequence, the region's economic development ecosystem is especially fragmented. Secondly, the past several years have seen the entrance of a number of additional actors, such as the region's Chambers of Commerce and other non-profit collaborations enter into the economic and workforce development arenas. This also coincides with the implementation of more regionally-focused and pragmatic economic and workforce development strategies among state agencies active in these arenas. As such, the impact of the fragmentation present in the region has been even further confused by a significant level of service duplication.

The principal intent of the Regional Collaboration Charrette process and related Network Mapping exercise is to identify the extent of the regional economic and workforce development ecosystems, the principal actors engaged in practice, and areas of gap and overlap. Additionally, the process solicited the perspectives of representatives of the business and service provider communities as to the extent and significance of the key issues facing the region and to identify possible solutions. This survey work also informed the conversation facilitated through a Regional Collaboration Think Tank event on December 8 and 9, 2014, as well as the development of a comprehensive regional action plan and layoff aversion strategy.

This technical paper presents a brief analysis of the survey results collected through the course of Future iQ Partners' engagement in the region. It begins with an analysis of the business perspectives and survey

partners surveys administered among the preliminary work in the field. An analysis of the network mapping exercise and related findings follows. The analysis will then conclude with a discussion of key findings as well as ways which the network mapping platform and other tools may be used in future initiatives.

The principal theme which runs throughout each of the survey results and the analysis contained wherein suggests that collaboration among economic and workforce development actors in the region is highly localized. It is also a process that is driven by necessity rather than choice. Collaboration further occurs in a reactive, crisis-driven manner rather than a proactive, opportunity-based environment. As such, significant shifts in the region's development culture and perspective on the roles of actors in these areas must occur in order to promote more meaningful collaboration across the region and to respond to future economic challenges and opportunities.

2.0 Business Perspectives Survey

The ongoing layoffs and production shifts occurring at Oshkosh Corporation's Defense Division have had a marked effect on the local economy. The company is the largest employer in the City of Oshkosh and its supplier relationships extend well beyond the city and Winnebago County. The majority of the affected workers both in which live and shop in the region. As a consequence, a number of firms both directly and indirectly related to the defense-related manufacturing supply chain have been affected.

It is also important to solicit the perspective of the business community in order to assess the overall function of the economic and workforce development ecosystem. Many of these firms have benefited both directly and indirectly from assistance and constitute the principal customer base for many of the ecosystem's key actors. As such, one of the first surveys conducted in the region focused on these key issues.

The ECWRPC, and the region's three largest Chambers of Commerce – the Fox Cities Chamber of Commerce and Industry, the Oshkosh Area Chamber of Commerce, and the Fond du Lac Association of Commerce were asked to solicit responses to a series of questions designed by Future iQ Partners with input from the Regional Collaboration Charrette subcommittee. In total, over 400 businesses were invited to provide feedback. Only 47 firms did so. This represents a response rate of slightly more than ten percent within the selected sample group. However, the significance of this perspective narrows significantly in light of the nearly 13,000 businesses currently operating in the region.

The limited response rate to the business perspectives survey is possibly significant for two reasons. Firstly, the timing of the survey (September and October 2014) occurred well after the two most significant layoff events at Oshkosh Corporation (November 2013 and June 2014). As such, the immediate impact of these layoffs had since dissipated. The second challenge highlighted in the low business response suggests that the region's economic development community have experienced difficulty in engaging the private sector in support of key initiatives. While this perspective may not be shared by all of the actors in the region, it is something that is fairly common in communities of all sizes. This finding is especially significant as many

of the recommended strategies that emerged from the Regional Collaboration Charrette process call for the

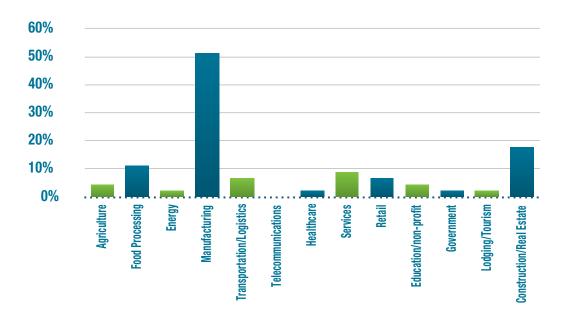
2.1 Respondent Characteristics

formation of a series of sustaining public-private partnerships.

The concentration of the majority of the respondent firms is located along the U.S. Highway 41 corridor. Forty-one of the forty-seven respondents or 85.5 percent are located in Fond du Lac, Outagamie, or Winnebago County. This concentration is consistent with the general impact of the layoff event.

The industry distribution of respondents is also fairly consistent with both the distribution of firms throughout the regional economy as well as our expectations regarding those firms most directly affected by the layoff event, as seen below.

WHAT INDUSTRY SECTOR DO YOU WORK OR OWN A BUSINESS IN?

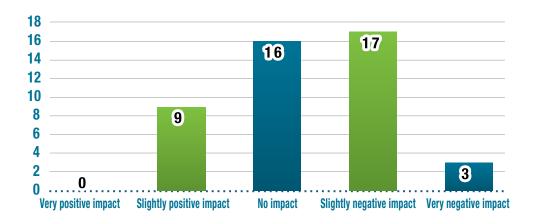


On a strictly comparative basis, the respondent distribution is biased towards the manufacturing and construction industries. However, prior research on the economic impact of layoff events such as this suggests that these are the two sectors most likely to be immediately affected. The presence of a large number of manufacturing firms (23) among the respondent base will have significant bearing on a number of future responses.

2.2 Layoff Effects

The majority of business respondents (35 or 77.8 percent) indicated they had no direct business relationship with Oshkosh Corporation. This is not surprising given the diversity of the region's manufacturing base and the fact that the sample was not biased on the necessity of a material relationship. Respondents were nonetheless asked to provide their estimation as to if and how the layoff event has affected their firm. Their responses are again summarized below. Please note that the distribution of responses follows the question wording in that effects were arrayed from most positive to most negative.

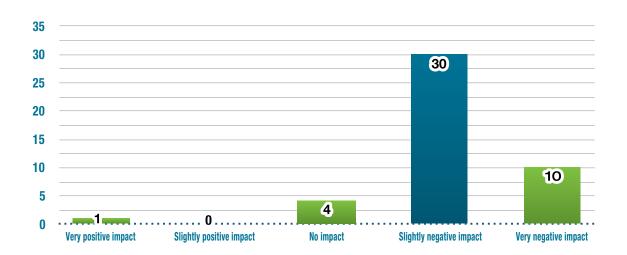
PLEASE RATE HOW THE LAYOFFS AT OSHKOSH DEFENSE WILL IMPACT YOUR BUSINESS



Here we see the impact both of the timing of the survey, as well as the relative scale of the regional economy as compared to the layoff event. A slight plurality of firms (20 or 44.4 percent) suggested that the slowdown at Oshkosh Corporation would have a materially negative effect on their firms. A greater number (25 or 55.6 percent) suggested that the layoffs either had no effect or a slightly positive impact. The specifically negative impacts cited by survey respondents pertained both to a reduction in supply chain activity along a number of dimensions and indirect implications for Oshkosh's real estate market. The positive effects cited almost entirely relate to the quality labor pool that was made available through the layoffs. The timing of the event is again critical in this regard as the layoffs occurred just as many of the

region's largest manufacturers reported a lack of qualified candidates in a number of skilled trade areas. Many of the workers affected by the second round of layoffs specifically fell within many of these needed occupations. These findings were again heavily influenced by the industry distribution of the respondent pool.

HOW SIGNIFICANT AN IMPACT DO YOU THINK THESE LAYOFFS HAVE HAD ON YOUR LOCAL ECONOMY AND COMMUNITY?

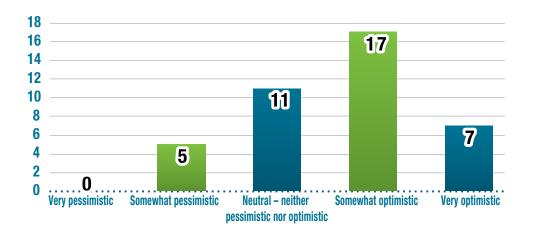


Respondents were also asked to assess the extent to which the layoff event at Oshkosh Corporation had impacted the regional economy. Here the respondents were significantly more pessimistic, with 89 percent suggesting that the layoffs had either a slightly or very negative impact. The specific effects cited by respondents here relate principally to the effect of the layoffs themselves rather than related business. Respondents noted the loss both of the well-paying jobs affected by the layoffs as well as the disposable income of the affected workers in the region's consumer base. Other respondents suggested that the layoffs may increase available residential real estate inventory, though it is uncertain as to whether and to what extent this has actually occurred. Again, the timing of the survey and the fact that the layoffs occurred during a period of declining regional unemployment likely masked the perception of these effects.

2.3 Prospects and Challenges Perspectives

In addition to assessing the impact of the layoff event at Oshkosh Corporation on both their businesses and the regional economy, we were interested in the respondents' outlook on the future potential of and challenges facing the region. These perspectives are integral to the formation of an accurate assessment of the region's economic and workforce development ecosystem effectiveness. Respondents were first asked to provide their level of relative optimism for the region's immediate economic future.

HOW OPTIMISTIC OR PESSIMISTIC ARE YOU ABOUT THE ECONOMY AND COMMUNITY IN THE REGION IN THE NEXT 3 TO 5 YEARS?

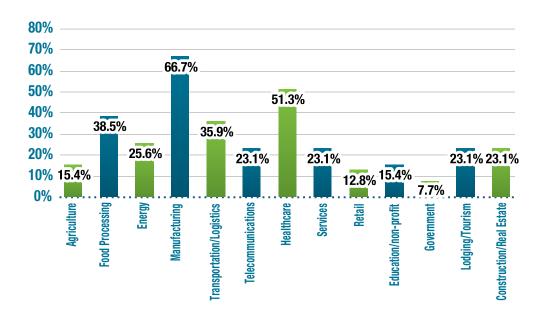


A majority of respondents here express some degree of optimism regarding the region's three-to-five year future. This timeframe presents a reasonable forecast and is therefore perhaps more measured than a longer-term outlook may be. This perspective was also heavily influenced by the respondents' industry composition, as suggested in many of the identified regional challenges.

Two consistent themes were identified as significant challenges – the regulatory climate and workforce availability. Business attraction was also identified as a notable challenge, as was the effect of globalization. The timing of the survey again had a notable bearing on the issues identified. The survey was administered within the final weeks of a closely contested gubernatorial campaign and many of the issues identified were either identified during the campaign or associated with a particular candidate. It is also important to note that many of the issues identified are among those most commonly addressed by the region's economic and workforce development professionals.

The business respondents were then asked to identify those industry sectors with the greatest growth potential over this same three-to-five year period. The selection of time period was important to maintain consistency between responses, but it may have impacted the respondents' perception as they were less likely to suggest that significant changes may occur. Respondents were allowed to select more than one industry sector, so the percentages presented in the chart below do not add to 100 percent.

WHICH SECTORS DO YOU SEE THE MOST POTENTIAL FOR ECONOMIC GROWTH IN THE NEXT 3 TO 5 YEARS, WITHIN THE REGION?



The growth perspectives presented here are both highly indicative of the current regional industry mix and influenced by the respondents' industry distribution. What is interesting is that both the food processing and energy industries are identified among those with significant growth potential, as significant regional attention has been given to both organizing and growing these sectors.

Workforce concerns were again suggested as imposing a limit on prospective growth, as does a focus on the redevelopment of existing properties. Significant opportunities were identified in organizing the region around U.S. Highway 41 and developing more civic infrastructure, such as a proposed convention center and amateur sports complex in Appleton. The consensus suggests that the region must`leverage its existing strengths in pursuing future growth.

2.4 Assessment of the Regional Economic and Workforce Development Ecosystem

A majority of business respondents (79.5 percent) had some level of engagement with either the economic or workforce development ecosystem over the last three years. This makes them uniquely qualified to offer their assessment of the effectiveness of these organizations. A number of notable challenges were further identified.

The majority of respondents (67 percent) indicated that their interaction with economic or workforce development organizations are self-initiated, presenting an opportunity for a more extensive and

coordinated business outreach campaign. The issues discussed in these interactions varied, with respondents identifying economic development incentives, market diversification, workforce training, and government alignment among the key themes. A majority of respondents (58 percent) also indicated that further action had occurred as a result of the initial conversation(s). However, a majority of the specific actions cited point to additional referrals or ongoing discussions rather than tangible results. This points both to the complexity of economic and workforce development practice, as well as the perception that the region is slightly too risk averse.

Finally, the business respondents were asked a series of questions regarding the need for collaboration among economic and workforce development organizations, their level of effectiveness, and examples of best practices. Nearly all respondents (35 or 92.1 percent) believe that collaboration between organizations is essential to the region's economic growth and vitality. Only 46 percent of respondents believe that the region's organizations currently collaborate effectively, however. Complexity, parochialism, and service duplication were all identified as critical barriers to collaboration. Consolidation of a number of regional organizations, as well as the recent creation of the Greater Oshkosh Economic Development Corporation (GOEDC) was mentioned as possible solutions.

The persistent narrative of these findings suggests that, while the effects of the most recent layoff event was less significant than was perhaps anticipated, that the region's business community believes that its economic and workforce development ecosystem is ill-equipped to meet a challenge of greater magnitude. These organizations are viewed as vital to the future success of the region, but are also viewed as presenting barriers to this growth. This again points to a potential future challenge in securing both industry buy-in and investment in regional growth initiatives.

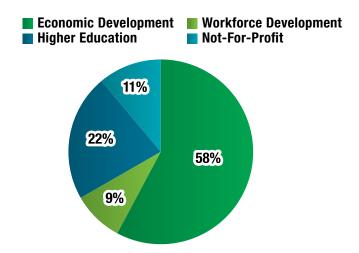
3.0 Regional Service Providers Perspectives Survey

The perspectives of the region's business community only provide one side of the story regarding the potential for collaboration among its economic and workforce development organizations. Soliciting the perspectives of those professionals active in these fields on many of the same issues is important to both validate shared perspectives and to identify any potential cognitive dissonance. To this end, Future iQ Partners again worked with the ECWRPC to both identify and obtain perspectives from many of these professionals.

A sample of 196 professionals representing a variety of economic and workforce development organizations both within the five-county study area as well as throughout Northeast Wisconsin was identified. Of this group, 71 individuals answered at least one of the survey questions, for a rough response rate of 36.2 percent. The higher response rate obtained here is not surprising, especially since this same sample was slightly expanded and used in the network mapping exercise discussed later in this report. We also know that the

respondents included in the sample are among the most highly-engaged and collaborative in the region as they were culled from the membership of a number of regional organizations, such as the Northeast Wisconsin Regional Economic Partnership and various committees associated with the ORDIDI process.

WHAT TYPE OF ORGANIZATION DO YOU REPRESENT?



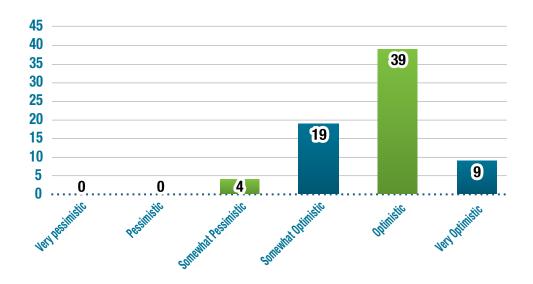
The distribution of respondents by organization type skews fairly significantly towards economic development organizations. However, the distribution does fairly closely match the organizational distribution of the sample, so it is of less of a concern. Respondents were not asked to identify either their location or their primary market. However, this will be addressed in the network mapping analysis that follows.

3.1 Economic Perspective

A final preliminary question asked of the service provider respondents assessed their level of optimism for future economic growth. The perspective of the respondents aligns closely with that of the region's business leaders. This suggests the presence of some consensus around the region's future trajectory, albeit in a limited timeframe.

Respondents were again not asked to identify specific industries that represent significant growth potential. They were, however asked to qualify their responses. Most respondents pointed to the strength of the region's industry mix, as well as an active hiring climate as causes for optimism. However, there were also far more mentions of concerns regarding labor availability and a lack of coordination among agencies that temper this sense of optimism.

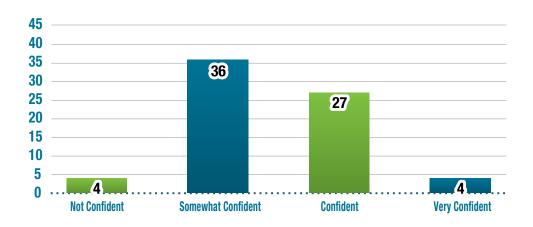
HOW OPTIMISTIC/PESSIMISTIC ARE YOU ABOUT THE FUTURE GROWTH OF THE REGIONAL ECONOMY?



3.2 Organization Effectiveness

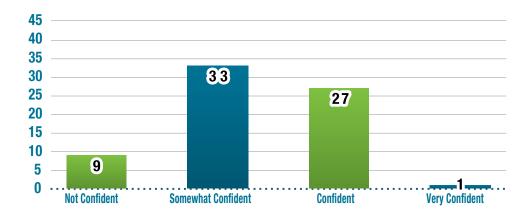
The survey next considered respondents' assessment of their own organization's effectiveness in meeting the needs of the region's business community. Here we see an equally tempered sense of optimism, suggesting a sense of pride in the progress made coupled with a recognition that improvements could follow.

HOW CONFIDENT ARE YOU THAT REGIONAL ECONOMIC AND WORKFORCE DEVELOPMENT ORGANIZATIONS (SUCH AS LOCAL ECONOMIC DEVELOPMENT OFFICES AND WORKFORCE DEVELOPMENT BOARDS) ARE ADDRESSING THE CURRENT NEEDS OF THE REGION'S BUSINESSES.



Ninety-four percent of respondents were at least somewhat confident that their organizations were meeting current needs. However, only four respondents felt very confident that this was the case. This again suggests that there is potential for future enhancements in service delivery through greater collaboration. The qualifying statements in this area refer to the quality of the professionals currently working in the region, the desire to partner, and the role that these organizations play in facilitating conversations about critical issues. However, an equal number of comments suggest that the politics of the region, the spirit of competition that exists between communities, and overlap between actors at the state and local level may negatively impact ecosystem effectiveness.

Respondents were next asked to identify what they believe to be the most critical issue facing the region. Many of the responses here again mirror the concerns raised by business leaders. Workforce availability is viewed as the most significant challenge, followed by the regulatory climate, infrastructure concerns, and the lack of an entrepreneurial climate. Each of these issues is again being addressed at some level of organizations that are currently active in the region. This also suggests that future efforts will need to increase.

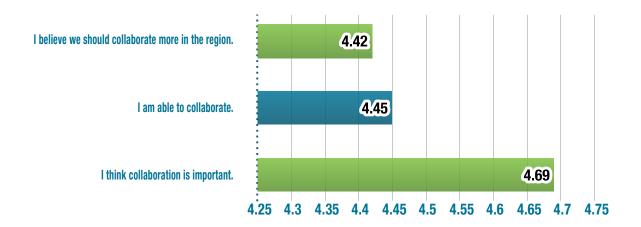


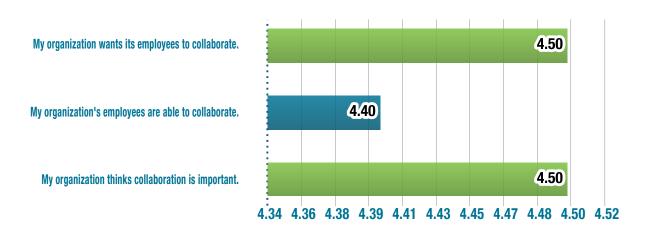
Projecting assessments of the region's organizational effectiveness into the future, we again see that the stakeholders are at least somewhat confident in their ability to meet future needs. However, a slightly higher number of respondents expressed concern in this regard. Again, respondents feel confident in the professionals currently engaged in the area. However, many of the same concerns regarding the lack of a spirit of collaboration, political competition, and limited resources were also expressed here.

Communication and collaboration were the two most frequent suggestions made to increase the effectiveness of the region's economic and workforce development ecosystem. There is also a desire to develop a strategy to market the region, and a clear delineation of "who does what" among service providers. Many of these same recommendations were offered by the business leaders. However, the service providers' suggestions are more specific and pragmatic.

3.3 Perspectives on Collaboration

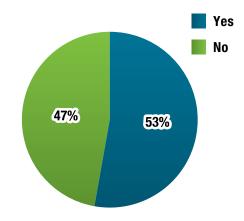
The service provider respondents were finally asked to assess both the importance of collaboration in the region, as well as to identify the ways in which the region may or may not collaborate presently.



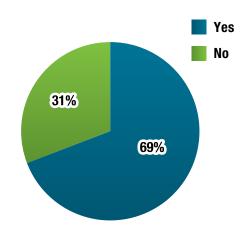


The two charts above present the average responses to a series of five-point questions measuring the importance and ability to collaborate among the region's stakeholders and organizations. In general, we see that both the respondents and their respective organizations see collaboration as a priority. However, there is significantly less confidence in the actual ability to collaborate, with many respondents suggesting that difficult exists in doing so. Finally, some disagreement within a narrow band exists as to the importance of collaboration into the future, with respondents being slightly less hopeful in this regard. This again suggests openness to collaboration, but does not explain why more significant collaboration has not yet occurred in the region.

BASED ON YOUR PERCEPTION OF THE REGION'S BUSINESS NEEDS, ARE THERE GAPS IN SERVICE DELIVERY?



DO YOU SEE AN OVERLAP OF BUSINESS
SERVICES AMONG MULTIPLE ORGANIZATIONS?



Finally, we see that there is some conflict within the region as to the distribution of service delivery. A slight majority of respondents suggested that there are currently gaps in service, while a larger majority of respondents identified areas of service duplication. This again points to the lack of a coordinated strategic vision for the region's economic and workforce development ecosystem, as well as a misalignment of resources and services across geographies as playing a key role in limiting the ecosystem's ability to respond to future mass layoff events and other economic challenges.

4.0 Network Mapping Collaboration Review

4.1 Fox Valley Network Mapping Process

East Central Wisconsin Regional Planning Commission (ECWRPC) contracted Future iQ Partners to conduct the Network Mapping process in order to assess the current economic development and workforce development ecosystems throughout the Fox Valley region. It was felt that to understand how relationships currently exist within the ecosystem would increase collaboration, improve services and define new ways in order to measure success. The Fox Valley Network Platform, which contains the network, is a self-learning tool. This shows relationship strengths, gaps and opportunities for increased and sustained collaboration.

Surveys were designed by Future iQ Partners, in consultation with ECWRPC in order to provide two interactive maps: 1) Collaboration 2) Technical Information. These maps would also be able to be filtered on the value of both the collaboration and technical information. There would also be statistical evidence on collaboration patterns and network navigators in the eco system.

The survey was sent to 300 people, identified by ECWPRC and members of the Charrette subcommittee as part of the current ecosystem on October 20, 2014 and the survey was closed on October 31, 2014. 136 people responded to the survey and this represented a 45 percent response rate, which is seen as quite robust in the field of network mapping. Two reminders were sent to all respondents who had not filled out the survey during the three weeks.

The Fox Valley Network Platform can be accessed at:

http://foxvalleynetwork.com/userlogin.php

4.1.1 Security Levels

There are two security layers to access the Platform, due to the personal information contained on the maps. The user login is ECWRPC, which brings the user through to the Home Page. The platform can be viewed with no personal information on the maps at this level. However, to access the maps with the names and personal information included, which gives a much richer level of analysis, there is a log in function in the top right hand of the Home Page. The login details are as follows:

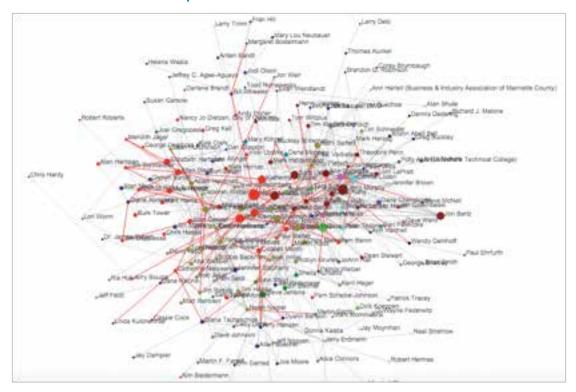
User Name: foxvalleynetwork

Password: ORDIDI

There are short training videos on this platform to teach the user how to read the maps, the two interactive maps, with statistical data and a range of papers which feature in the resource section.

The Collaboration Map and Technical Information Map will be explored in more detail, in the next two sections.

4.2 The Collaboration Map



This is the Collaboration Map for all of the counties represented in the Fox Valley Network Mapping process. The red lines represent reciprocal relationships, where people have nominated each other as people whom they collaborate with.

For the purposes of this document, the collaboration map was filtered to only include the main counties which represent the Fox Valley Region – these are Fond du Lac, Calumet, Outagamie, Winnebago and Waupaca.

Geographical differences were explored, followed by levels of interaction – Networking, Coordinating, Cooperating and the highest value of interaction, Collaboration.

Winnebago and Outagamie were seen as having much higher levels of collaboration, and reciprocity than the other counties in the map. This could reflect the amount of people who responded to the survey, in the process or indeed, the role/employment of the people in these two counties. The large nodes typically represented people who represent East Central Wisconsin Regional Planning Commission and whom work in the area of economic development. Winnebago county also connected other counties together, in the collaboration map, again this could have been as a result of East Central Wisconsin Regional Planning Commission being located in Winnebago.

When the levels of collaboration were explored, networking and coordination were notable for their lack of reciprocity. This would be expected with these looser based forms of interaction, whereupon the notion of

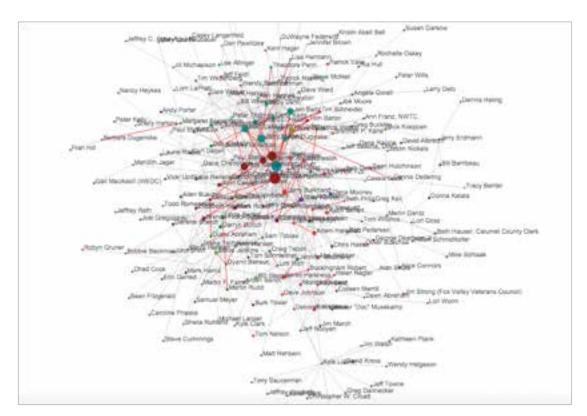
trust and commitment would not be as important. The connectivity and reciprocity was much higher in the cooperation and collaboration interaction maps.

The Organization Type collaboration map was also explored. This was a tightly networked map, which became increasingly reciprocal and connected with the addition of the Regional Economic Development and State Government Agency.

4.3 The Technical Information Map

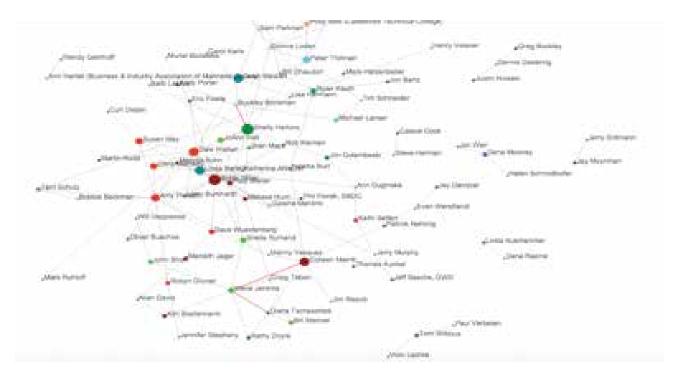
The main findings from exploring the technical information maps, was that there was a much stronger network in the areas of Business Retention/Expansion, Community Development and Industry Cluster Organization. The weak networks showed up in the key areas of Entrepreneurial Support and Workforce Recruitment and Training. These areas would require intervention strategies in order to improve those networks, which are important areas for the economic development of the Region.

For the purposes of this analysis, as with the collaboration map, the main counties in the Fox Valley Region were explored. It is interesting to view the overall ecosystem, with all of the counties highlighted in order to show the strength of the Business Retention/ Expansion, Community Development and Industry Cluster Organization network.



There are clusters across the map, and a tight network in the center of the map, with reciprocal relationships between large nodes. Work could be carried out, however, to tighten the overall network outside of this core connected network.

As a point of comparison, it is interesting to view the overall ecosystem, with all of the counties highlighted in order to show the weakness of the Entrepreneurial Support and Workforce Retention/Training areas.



This map has few reciprocal relationships, which is of concern, as this map shows the advice/technical information relationships. It also features less connectivity, with a cluster around Bobbi Miller and Amy Pietsch. However there are individuals working in pairs, totally disconnected from the other people working in these important areas, which are essential to the economic development of the area.

These maps will be explored in greater detail in the following sections.

5.0 Network Mapping Collaboration Review - Geographical Differences

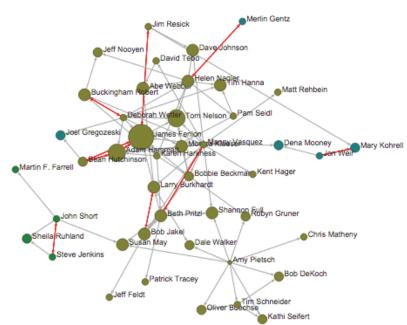
It is advantageous to first filter by county on the Collaboration map. As the main counties in the Fox Valley region are Fond du Lac, Calumet, Outagamie, Winnebago and Waupaca – these are the most useful to filter on for the purposes of this example. The color coding for the collaboration map by county is as follows:



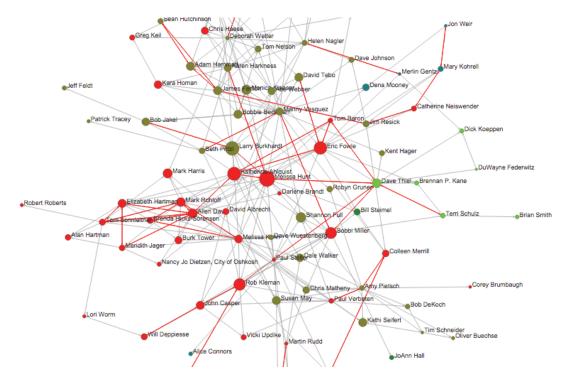
Primarily it is useful to turn on the Calumet and Fond du Lac counties. The following collaboration patterns can start to be seen. There is a low level of reciprocal collaboration (identified by the red arrows) and the collaboration clusters are only within Fond du Lac County and within Calumet County.



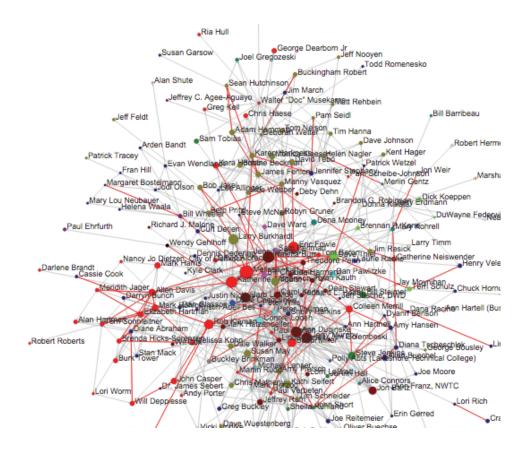
The collaboration pattern changes when Outagamie County is added to the map. There are many more reciprocal relationships and strong clusters – particularly in Outagamie County itself. This county also connects the other two counties.



With the addition of Winnebago County (in red), a different collaboration pattern emerges. The county has a lot of reciprocal ties with each other and with the other counties. There are large nodes, which represent those individuals who have been selected by a greater number of other individuals. These individuals are either holding together clusters or have a lot of connections.



When all of the counties on the map are shown on the collaboration map, we see a similar collaboration pattern in the center of the map, mainly represented by Winnebago County and the larger nodes within the ecosystem, as mentioned previously.

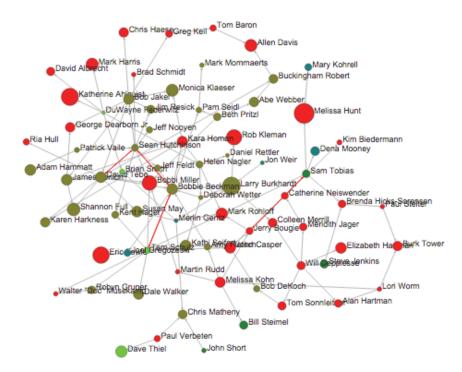


5.1 Levels of Collaboration

There are different levels of interaction which are able to be explored on the collaboration map. Collaboration is the highest level, followed by cooperation, coordination and networking.

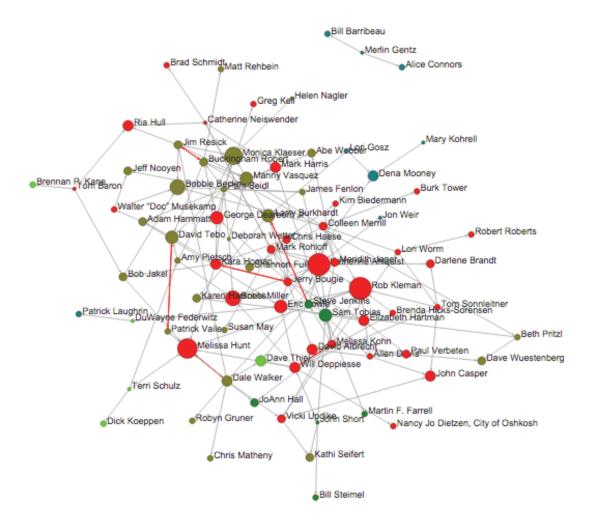
For ease of viewing the map will be filtered by the main counties in the Fox Valley region - Fond du Lac, Calumet, Outagamie, Winnebago and Waupaca.

5.1.1 Networking Level of Interaction



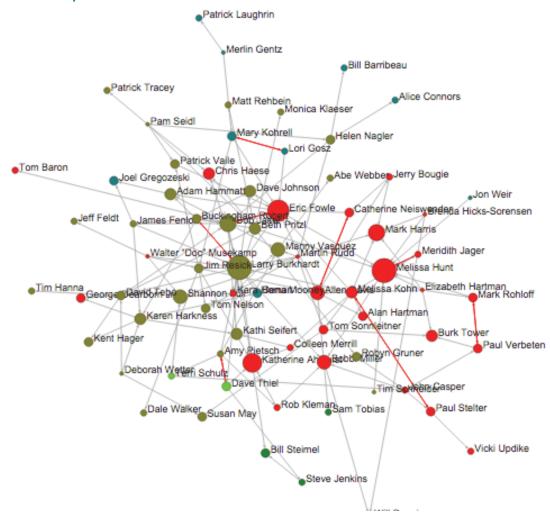
There are few reciprocal ties on the networking level, and the counties of Outagamie (Green) and Winnebago (Red) being the most networked across the map.

5.1.2 Coordination Level of Interaction



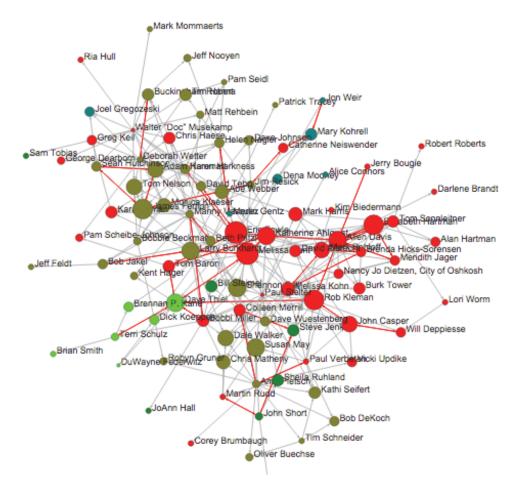
At the coordination level, there are again few reciprocal relationships, and the map is mainly comprised of Outagamie and Winnebago County, who tend to coordinate with people from their own county. There are small clusters of coordination, held together by a few people.

5.1.3 Cooperation Level of Interaction



As would be expected, at the cooperation level, there are larger numbers of reciprocal relationships, and more connection between the counties. This is a much more interesting map in terms of connectivity than the networking or coordination maps.

5.1.4 Collaboration Level of Interaction

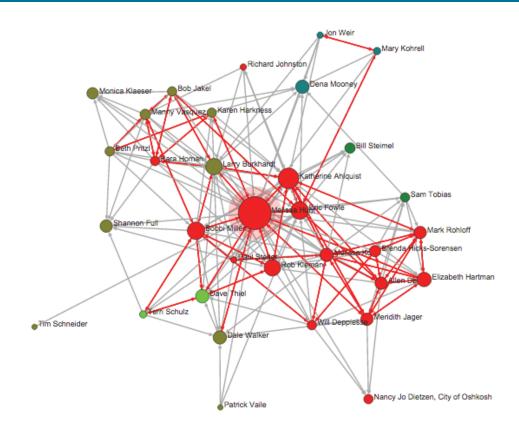


This map is much more densely populated and connected, with greater levels of reciprocal relationships and larger nodes. Therefore, the people who are connecting at this level tend to have lots of connections. This could be due to their role/employment.

5.2 Importance of Key Nodes or Connectors

The maps have shown varying sizes of nodes (circles) on the maps. The larger the node, the more connections that node has. Therefore, these people who are represented by the nodes are key connectors on the maps. They are also known as Network Navigators.

One of the largest nodes on the map is Melissa Hunt. It is interesting to view her own personal map, in order to see her connections – both reciprocal and nonreciprocal. Melissa Hunt's map is very powerful, in terms of reciprocal relationships and her connections to other counties, outside of Winnebago County, which is considered her "home" county. It also makes intuitive sense that she would present the nexus of connectivity as her role as a Regional Account Manager with the Wisconsin Economic Development Corporation crosses a number of functional lines.



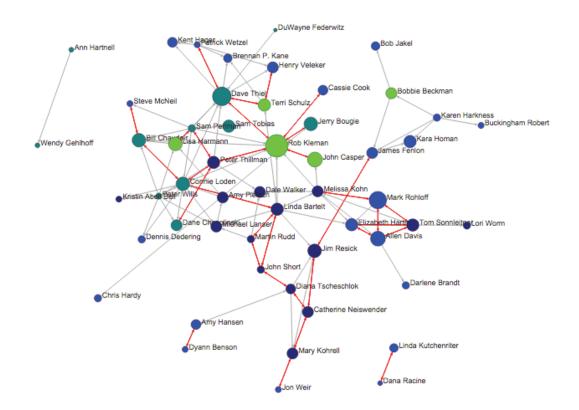
Collaboration via Organization Type

It is useful to explore the Collaboration Map by Organization Type. This shows the place and influence in the ecosystem of the different types of organizations in the region.

The colour coding for these filters are as follows:



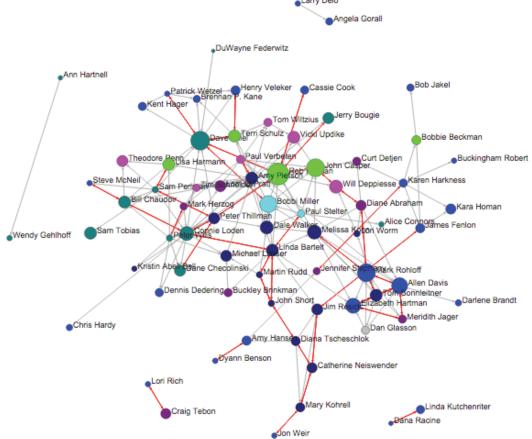
Removing all filters, except for Chamber of Commerce, City Economic Development, Country Economic Development and Educational Institutes, the following map develops:



There is a lot of reciprocity within this network, with some strong connectors in Rob Kieman and Dave Thiel. There are smaller nodes, such as Connie Loden and Linda Bartlett who are at the centre of clusters and whom are as instrumental to the network as the larger nodes. This is a healthy network, however there are some disconnections around the edge of the map which could benefit from intervention.

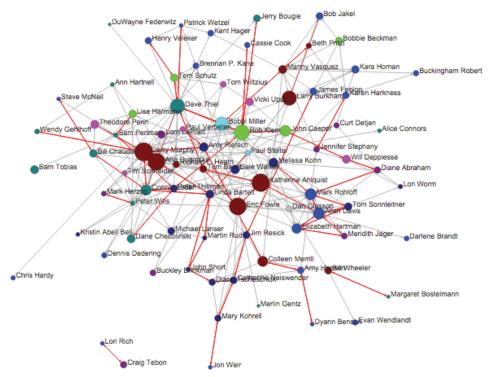
Adding Federal Government Agencies, Not for Profits, Private Sector and Workforce Development sectors, the map doesn't develop as would be expected with the additions of these sectors.





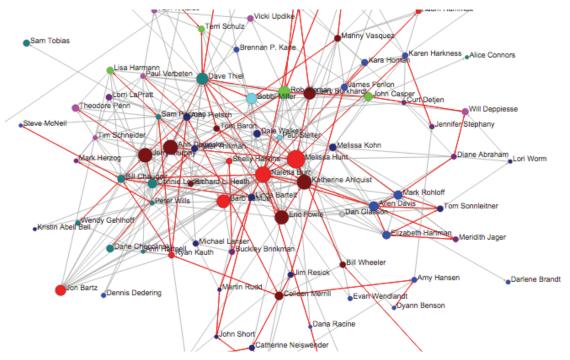
The map is similar in connectivity, with the addition of more clusters held together by people such as Bill Chaudoir, Bobbi Miller, Mark Rohloff and Karen Harkness. Dave Thiel and Rob Kleman are still the largest nodes on the map. This is a highly connected map, with much reciprocity.

Finally, it is necessary to add the State Government Agency and Regional Economic Development to discover the complete map.



Primarily, when Regional Economic Development is added, some very large nodes enter the map in the form of Jerry Murphy, Ann Duginske, Katherine Ahlquist, Eric Fowle and Larry Burkhardt. They draw the network even tighter together in this map.

With the addition of the State Government Agency, the map changes. There are again, very large nodes entering the map in the form of Naletta Burr, Melissa Hunt, and Barb LaMue. These connectors really 'glue' the network together at a collaboration level.



5.3 Network Navigators

The following table shows the ranking of Network Navigators (large nodes) in the overall map, this is differentiated also by level of interaction: Networking, Coordinating, Cooperating and Collaboration. This reflects the findings on the maps.

Network Navigators

This list below shows the number of nominations a person has received across four different types of interactions.

People towards the top of the list can be considered 'Network Navigators' that can help broker connections to others. Knowing just a few hubs can be a very effective way of navigating a network.

Total Nominations	Networking	Coordinating	Cooperating	Collaboration
46 - Melissa Hunt	7 - Bobbi Miller	11 - Katherine Ahlquist	12 - Katherine Ahlquist	22 - Melissa Hunt
41 - Eric Fowle	7 - Eric Fowle	11 - Melissa Hunt	11 - Melissa Hunt	19 - Jerry Murphy
40 - Katherine Ahlquist	6 - Allen Buechel	10 - Eric Fowle	11 - Ann Duginske	15 - Naletta Burr
37 - Naletta Burr	6 - Larry Burkhardt	9 - Rob Kleman	10 - Larry Burkhardt	15 - Eric Fowle
36 - Jerry Murphy	6 - Kathi Seifert	8 - Naletta Burr	10 - Jerry Murphy	15 - Dave Thiel
35 - Ann Duginske	6 - Bobbie Beckman	8 - Ann Duginske	9 - Naletta Burr	15 - Katherine Ahlquist
32 - Larry Burkhardt	5 - Mark Rohloff	7 - Sam Tobias	9 - Eric Fowle	15 - Rob Kleman
30 - Barb LaMue	5 - Brenda Hicks-Sorensen	6 - Bobbi Miller	8 - Shannon Full	14 - Jon Bartz

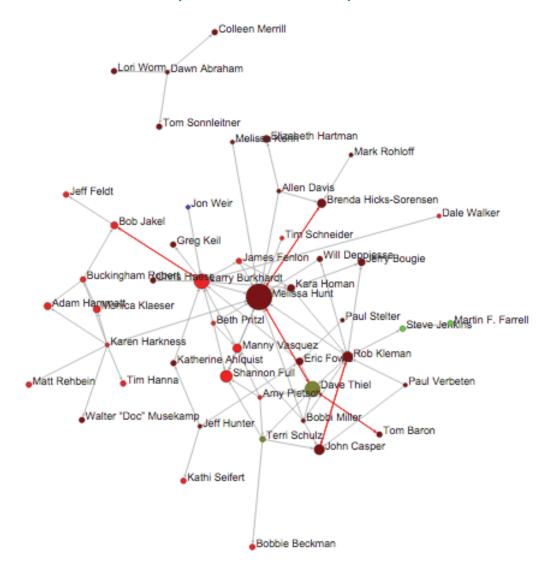
6.0 Network Mapping Technical Information Review

The Technical Information map reflects where the people within the Fox Valley ecosystem go to, in order to obtain information about the following areas:

- Business Retention/Expansion/Finance
- Community Development
- Entrepreneurial Support
- Industry Cluster Organization
- Workforce Recruitment/Training

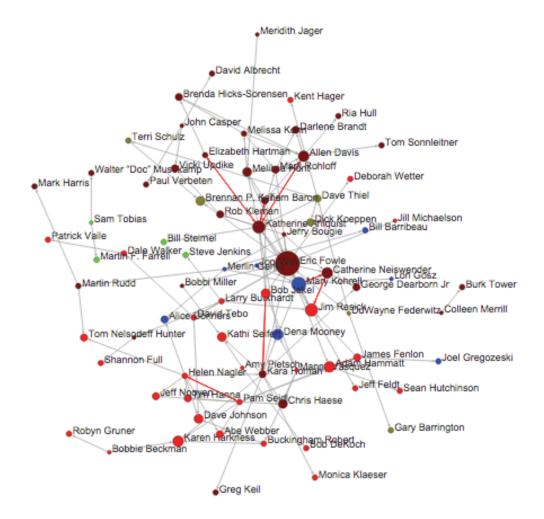
As with the Collaboration Map review, it is advantageous to filter the Technical Information map according to the main counties of Fond du Lac, Calumet, Outagamie, Winnebago and Waupaca. Then it is necessary to view each technical area of expertise.

6.1 Business Retention/Expansion/Finance Map



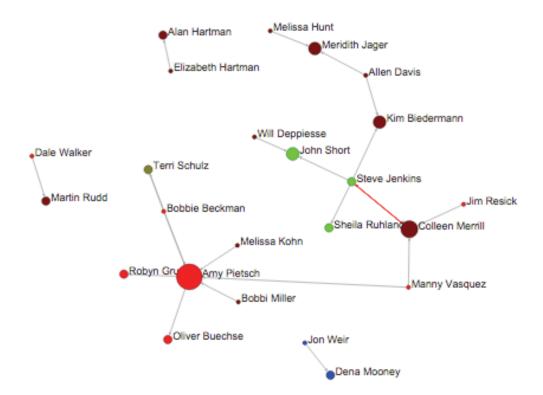
This map shows a small cluster around Karen Harkness, with another cluster around Rob Kleman. These again represent highly localized clusters in both Appleton and Oshkosh, respectively. The largest node and navigator in this sector is Melissa Hunt – who connects other clusters together. It would be expected that this particular sector – Business Retention/Expansion and Finance would be stronger due to the nature of the work that is being carried out with regard to economic development in the area. However, there are reciprocal relationships, and clusters formed with some large nodes and connectors.

6.2 Community Development Map



This map shows a strong advice/information network around the area of Community Development. There are some strong clusters, with some large nodes, some reciprocal relationships and overall this map shows a healthy advice network. Again, there could be more connectivity however, outside of the main nodes of Eric Fowle and Katherine Ahlquist who represent the role of the ECWRPC in coordinating these activities through comprehensive planning and the annual CEDS process. This may also be due to the level of overlap which exists between the region's understanding of community and economic development. Many of the actors in each of these maps perform functions in both areas at various levels.

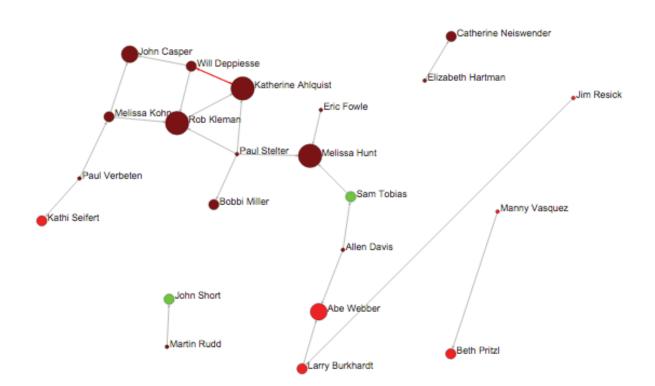
6.3 Entrepreneurial Support Map



This map shows the information network around the area of Entrepreneurial Support. This should be a strong network, in light of the economic development work being carried out in the region. The network is very disconnected. There are two main clusters around Amy Pietsch and Steve Jenkins. There is virtually no reciprocity in the network and there are people working in pairs outside of the core network. This would exemplify a weak network, which would need an intervention strategy to improve the connectivity. This also suggests that entrepreneurship is viewed locally as a highly place-dependent enterprise, a view which is consistent with perspectives of regional competition that exist.

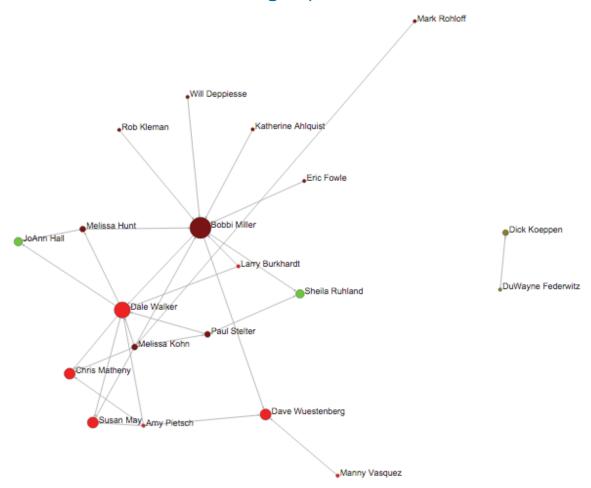
6.4 Industry Cluster Organization Map





This map shows the information network around the area of Industry Cluster Organization. This is a moderately disconnected network, with people again working in pairs and a lack of reciprocal relationships. There are some large nodes, which hold the network together, and if these nodes were removed the network would become totally fragmented. This map would again exemplify a network which would need an intervention strategy to increase its connectivity and therefore, potential effectiveness.

6.5 Workforce Retention/Training Map



This map shows the information network around the area of Workforce Retention/Training. It should be a strong network, as this region is trying to retain and retrain its workforce. The map shows that two main nodes – Bobbi Miller and Dale Walker, are the 'go to' people in this area as most of the arrows point towards those people. This again makes functional sense as Bobbi and Dale represent the Fox Valley Workforce Development Board and Fox Valley Technical College – two of the key actors in the regional workforce development infrastructure. However, there is little connection outside of these two clusters and no reciprocity. This network would require intervention in order to maximize its potential connectivity and effectiveness.

6.6 Network Navigators in the Technical Information Map

Network Navigators - Technical Expertise

This list below shows the number of nominations a person has received across four different types of interactions

People towards the top of the list can be considered 'Network Navigators' that can help broker connections to others. Knowing just a few hubs can be a very effective way of navigating a network.

Total Nominations	Workforce recruit/training	Industry cluster organisation	Entrepreneur Support	Community Development	Business retention/ expansion/finance
31 - Melissa Hunt	8 - Shelly Harkins	13 - Barb LaMue	6 - Colleen Merrill	23 - Naletta Burr	20 - Melissa Hunt
28 - Naletta Burr	8 - Bobbi Miller	12 - Jerry Murphy	5 - Amy Pietsch	20 - Eric Fowle	13 - Jon Bartz
24 - Eric Fowle	6 - Dale Walker	5 - Ann Duginske	3 - Ryan Kauth	10 - Katherine Ahlquist	8 - Rob Kleman
20 - Jerry Murphy	6 - Dean Stewart	5 - Melissa Hunt	3 - Steve Jenkins	9 - Mary Kohrell	8 - Dave Thiel
17 - Rob Kleman	5 - Linda Bartelt	4 - Dan Glasson	2 - John Short	9 - Richard L. Heath	7 - Larry Burkhardt
17 - Barb LaMue	4 - Chris Matheny	4 - Katherine Ahlquist	2 - Kathy Doyle	7 - Catherine Neiswender	5 - Jerry Murphy
16 - Jon Bartz	4 - Susan May	4 - Rob Kleman	2 - Bill Wheeler	7 - Mark Rohloff	5 - Carol Karls
15 - Katherine Ahlquist	4 - Peter Thillman	3 - Linda Bartelt	2 - Bill Steimel	7 - Jim Resick	5 - Connie Loden

7.0 Conclusion and Applications

The five-county region contained within the study area referred to in the preceding work contains one of the most dynamic economies in the state of Wisconsin. It also contains a vibrant population that enjoys a high quality of life and identifies with the municipalities large and small that dot the landscape. The region is also home to a number of dedicated organizations and professionals providing economic development and workforce development services for businesses and jobseekers alike. In many instances these organizations are aligned around the same municipal lines.

The survey results and network mapping analysis presented in this report highlight the importance of perceptions and connections in building a more collaborative ecosystem. The level of collaboration currently present within the region was highlighted by survey respondents and think tank participants as one of the strengths in responding to the challenges presented by the layoff event at Oshkosh Corporation and other companies in the past. However, the consensus among these same stakeholders suggests that the potential for greater collaboration in a number of key technical fields, such as entrepreneurial support and workforce development exists and should be explored.

The network mapping exercise demonstrated that few connections exist between the region's economic and workforce development ecosystems outside of the networks maintained by a few key network navigators. Similarly, the typical level of collaboration that exists within the region happens at relatively low levels and does not reach the definition of true collaboration that may lead to significant advances. This potential

again exists within the region, but reaching it will require the fostering of an organizational culture that values collaboration and the facilitation of dialogues between communities to discuss how they may benefit from closer relationships.

The potential benefit of a greater level of collaboration between the region's economic and workforce development stakeholders is significant. Aligning economic and workforce development strategies in the region will enhance the quality of services provided to the existing business community and provide a strong inducement for future business relocation and expansion. Similarly, the survey results point to areas of potential service growth where gaps exist presently. Collaboration in these areas will allow the participating organizations to benefit from significant economies of scale and shared knowledge. This will again enhance the spirit of collaboration that will cross multiple jurisdictions and functional lines.

The network mapping platform developed in this process may serve as a powerful tool for fostering greater connectivity in the region. It can enable stakeholders to identify individuals with technical knowledge in a given area. It can also point them to individuals that they may not be connected to, but are connected to peers and colleagues. The platform may also be used to identify areas that may benefit from greater service provision or more connectivity to the core region.

The platform's effectiveness is greatly dependent on the timeliness of the people and connections depicted. The current network maps represent a singular point in time and the connections of a narrowly-defined constituency. It is strongly recommended that the mapping exercise be revisited in the next two years to both increase the number of participants, and to document the new connections that have formed through the actions and recommendations of the ORDIDI process.

8.0 More Information

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Jeffery specializes in detailed economic analysis and data interpretation. He has worked on industry clusters, City partnerships, workforce development and economic trends and indicators. He has led research and development projects in transportation, and conducted program monitoring. His has detailed local knowledge of the economic landscape in the Midwest, having worked professionally in this area for over a decade.



Celine Beurle, Future iQ Partners

With an academic background in Sociology and Philosophy, Celine has led many projects and initiatives within her career and is passionate about helping to create effective strategies for communities and organisations. She is now developing the Future iQ market in Europe, as Managing Director of Future iQ Europe.

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