SUMMARY OF MANUFACTURING ROUNDTABLE

HOSTED BY

THE SURDNA FOUNDATION

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SUMMARY PREPARED BY

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INTRODUCTION — OVERVIEW ON SURDNA

In 2009, the Surdna Foundation adopted a new mission focused on the creation of just and sustainable communities—communities guided by principles of social justice and distinguished by healthy environments, strong local economies, and thriving cultures. In doing so, the foundation affirmed not only the importance of these issues, but also the centrality of the connections between them. Substantive changes in Surdna's programs were deliberately developed with an eye towards how environmental, economic, and social goals achieved in concert could define just and sustainable communities in the United States.

In particular, the work of what had been the Community Revitalization Program, which had developed a five-year, place-based strategy targeting nine weak and strong market communities, was refocused towards building "strong local economies." Through strategies that support regional economic development and integrate workforce training opportunities for low- and moderate-income residents, the new Strong Local Economies Program seeks to improve improves residents' livelihoods and access to quality jobs, especially in immigrant communities and communities of color.

Surdna's new Sustainable Environments Program seeks to create just and sustainable communities where consumption and conservation are balanced and innovative solutions to environmental problems improve people's lives. The program funds in three related priority areas—Climate Change, Green Economy, and Transportation and Smart Growth—to help make the theory of a carbon free society into a practical and achievable reality for communities across the United States. Specifically, its green economy work seeks to ensure long-term economic prosperity and the future of our planet, all while providing pathways out of poverty for our nation's most vulnerable communities.

In the context of these two programs, the future of manufacturing in the U.S. emerged as an area of potential promise that could unite common goals and strategies across the foundation. Furthermore, many of the weak market cities that Surdna had been working in had been seriously impacted by manufacturing decline. Through its existing green economy work in these places, Surdna staff realized the impact of the declining manufacturing base on these communities, and most importantly, on the economic opportunities of low- and moderate-income residents. Research in the workforce development field revealed the growing importance of "middle skill" jobs to ensuring access to family wage employment, and many occupations within the manufacturing sector fell within this definition. Finally, manufacturing represented a potential area of intersection with Surdna's new Thriving Cultures program as well, which had expressed interest in the role of design in revitalizing the manufacturing sector.

As a result, the Foundation became interested in developing a more comprehensive strategy to advance America's manufacturing sector. As the U.S. rebuilds from our current economic downturn, it is imperative that the nation develop as an exporting

nation, rather than simply a consuming nation. For Surdna and others interested in promoting a sustainable and strong economy, a revitalized domestic manufacturing sector is certainly seen as part of this equation.

To further its understanding of what a strategy to support manufacturing might consist of, the Foundation convened a Manufacturing Roundtable in January 2010. This roundtable was comprised of 17 national experts, including local practitioners, policymakers, academics, and individuals representing the unions and the manufacturing business community (see Appendix for full list of attendees). The purpose of the roundtable was to provide an opportunity for the Foundation to learn from local and national experts about the challenges and opportunities for American manufacturing and to explore whether and how the Foundation could expand its support in this area.

The roundtable began with background on the Surdna Foundation, and its perspective on why it had chosen to focus on manufacturing as important to our economy, our communities, and the people who live in them. Three discussion sessions were then held: 1) Restoring the Competitiveness of U.S. Manufacturing Sector; 2) Challenges and Opportunities in Workforce and Training; and 3) Federal Policy and State and Local Support Programs. The fourth and final session focused on opportunities for the field, specifically regarding areas where the philanthropic sector could make a difference with its grantmaking and other resources.

This white paper provides some of the key themes and findings from these discussion sessions and lays out some of the implications of the roundtable for future activity in the field, and, in particular, for the funding community. The implications consider both the grantmaking activities of foundations as well as their critical "beyond the money" activities. These implications touch on a variety of wide-ranging, yet interconnected issues, and help to reveal how Surdna's distinct program areas could start to collaborate around a manufacturing strategy.

The Foundation is thankful to the following people for the assistance: Michael Kane and Beth Siegel of Mt. Auburn Associates, who helped develop and facilitate the roundtable, Andrew Ehrich, Kim Musler, Sharon Alpert, and Kim Burnett on our staff who developed and coordinated the event, our national experts, and our Trustees, Bruce Abernethy, Larry Griffith, and Michael Spensley, who gave of their time to participate in the event and who provided such wonderful insights and expertise.

KEY FINDINGS FROM THE ROUNDTABLE DISCUSSIONS

There are Multiple Reasons to Focus on the Competitiveness of the Nation's Manufacturing Sector

- **The significant job losses in manufacturing have had a large impact on certain communities and segments of the population.**

Susan Houseman from the Upjohn Institute provided an overview of some key trends in manufacturing:

- Overall, manufacturing employment dropped by 30 percent between 2000 and 2009, with 3.5 million manufacturing jobs lost between 2000 and 2007, and an additional loss of 2.5 million manufacturing jobs since 2007.
- States with the highest share of workers in manufacturing are Wisconsin, Illinois, Iowa, Arkansas, Alabama, and Mississippi.
- Real value-added in manufacturing grew at an average annual rate of 3.0 percent in the ten years between 1997 and 2007, only slightly less than the 3.1 percent growth rate for all private industry. However, most of this growth is accounted for by technology products (computers and related electrical equipment). Netting out the computer technology sector, which accounts for just 9% of manufacturing employment, the average annual growth rate for rest of manufacturing was weak--0.9 percent over the decade.
- The share of manufacturing workers who have attended at least some college has been rising steadily, from about 20 percent in 1969 to over 50 percent in 2006.
- There are real pressures from other countries in terms of outsourcing. In Mexico, wages are 12 percent of U.S. production worker hourly costs; in China, wages are 3 percent of U.S. hourly production worker costs.

➲ **Manufacturing remains one of the few pathways to a middle class life for many individuals and for many communities.**

There are a number of studies that have looked at how the losses in manufacturing are affecting specific communities and groups within the U.S. There is also a clear understanding that communities that were highly dependent upon the auto industry are being particularly hard hit and that these communities are facing significant challenges in rebuilding their economic base.

Beyond these hard hit communities, there was a broader concern that manufacturing provides one of the few avenues for middle class wages for a relatively large segment of residents in this country who do not have a college degree. In particular, there is evidence that the decline in manufacturing employment has had a particularly severe impact on the economic prospects of African-Americans and other minority groups.

There is concern that any further erosion of our manufacturing base will result in the further erosion of this nation's middle class.

➲ **There are also macro reasons to focus on manufacturing. The U.S. trade deficit is closely tied to the strength and breadth of our manufacturing sector.**

Americans still need manufactured products and there are two ways to get them: either we make them or we trade for them. Increasingly, as the U.S. has stopped making things, we have increasingly imported them. The result is a growing trade deficit, particularly with China, which is largely being financed by other countries. As the U.S. imports increasing amounts of goods, the negative balance of trade puts the country in a vulnerable position that is of growing concern to economists.

➲ **The U.S. cannot continue to be a global leader in innovation while outsourcing most of its production.**

There is further concern that the current model being pursued by China and other nations is likely to lead to the erosion of the U.S. innovative capacity. There are some analysts who believe that the U.S. can hold on to the high-end, research and development, design, and engineering components of manufacturing and outsource the routine and assembly functions to low-cost locations. Two major counterarguments were made to this premise.

- First, the historical economic trajectory of Japan was noted as an example of the risks of this strategy. While once only a low-cost producer, Japan quickly became a major source of innovation and its companies become strong, global competitors of U.S. manufacturers. A similar trend is likely to occur in China and other Asian countries that, like Japan, are adept at moving up the value chain. These countries are making significant investments in innovation and in research and development. For example, they not only seek to manufacture solar panels, they are now seeking to become the source of innovation and design in the solar field.
- Second, many believe that the ability to innovate is closely related to the production process. As companies outsource production as well as other functions, the U.S. is losing what Gary Pisano and Willy Shih of Harvard Business School call our "industrial commons" — that includes "R&D know-how, advanced process development and engineering skills, and manufacturing competencies related to a specific technology."

There is Currently a Mismatch between the Perceptions and Realities Related to the Manufacturing Sector

➲ **Current trade policies are based upon a set of assumptions that may no longer be accurate.**

There is a general view that while U.S. companies can compete with other companies, the U.S. is having a difficult time competing with other countries, most notably China. Current models of trade are based upon a set of assumptions that no longer represent the current reality. Basically, while the U.S. is pursuing a free trade policy and does not have an industrial policy that subsidizes certain sectors and types of activities, other nations are subsidizing activity, are making major investments in technology and innovation capacity, and are providing the support needed so that their country's industries can compete on more favorable terms. As a result, many U.S. manufacturers are at a competitive disadvantage and are negatively impacted by current trade policy.

➲ **Some of the commonly held notions about the performance of the manufacturing sector in the U.S. are open to question.**

Those involved in the roundtable noted that much of the data and analysis that are available on the U.S. manufacturing industry are somewhat misleading and have led to some questionable conclusions about current conditions. Many recent reports on the manufacturing sector, including the recent report by the Obama Administration, *A*

*Framework for Revitalizing American Manufacturing***,** note that while employment is declining, overall productivity in manufacturing has been rising quickly.

Two particular issues were noted that may call into question some of these findings.

- First, with the growing use of temporary agencies and staffing companies to fill manufacturing jobs, the actual number of jobs in manufacturing might be understated. In other words, if an employee is hired by a temporary agency or other professional employer organization (which is increasingly common) and that worker is listed as an employee of those agencies, the job is counted as part of "business services," not manufacturing. Similar issues arise as manufacturers continue to outsource greater numbers of tasks to other firms, whose employees then may not be counted as part of the manufacturing workforce.
- A second, related issue has been an overstatement of the productivity gains in manufacturing. Productivity is measured on a per employee basis. If the number of employees is being undercounted as a result of the large number of contract workers, the rate of productivity is being overstated. Furthermore, many of the gains in productivity can be attributed to improvements in information technology, not to the manufacturing industry itself. If these gains are taken aside, productivity gains for the sector are much smaller, suggesting further evidence of the data overstating these increases.
- **The decline in manufacturing has created the perception that there are no longer good jobs available. In reality, many manufacturers are actually having difficulty accessing the skilled workers that they need.**

While the recession has tempered the severity of the workforce development issues in manufacturing, in some communities there continues to be a mismatch between the demand for skilled workers and the ability of the system to fill these positions.

Roundtable participants involved in workforce development report that there is still demand for highly-skilled manufacturing workers due to the aging of the workforce and the reduction in the historic education and training pipeline. Existing Department of Labor projections of job vacancies often do not reflect current market conditions. For example, in Pittsburgh, the state was projecting job openings at a fraction of what New Century Careers, a local organization that trains highly skilled manufacturing workers, was seeing on the ground. The reasons for the discrepancies between the official projections and the experience of practitioners are unclear and may require additional research and analysis.

The mismatch between the perception and reality has meant that potential workers are both unprepared and unwilling to enter the manufacturing field, as many of the issues in developing a skilled workforce for manufacturing involve perceptions about manufacturing by those in the workforce system, educators, parents, and our youth. There is anecdotal evidence that the commonly held perceptions that manufacturing is dying and dirty are affecting the supply of workers by making many individuals reluctant

to enter the field, but it should be noted that due to a lack of data, we do not fully understand how these perceptions are affecting individual career choices.

The mismatch between perceptions and realities has also affected the investments of the workforce development system in education and training for manufacturing careers. For example, many educational institutions, most notably the vocational schools, have cut back on their training for manufacturing based upon data that shows it is a "declining" field. In addition, state and local workforce development strategies tend to focus on what are perceived to be "growth industries." This has led to an emphasis on education and training for healthcare careers and other occupations in industries where new net job growth is anticipated, rather than industries that might offer employment opportunities related to vacancies resulting from retirement and a diminished pipeline.

- **The current perception is that U.S. manufacturers can no longer profitably produce in the U.S. due to its higher cost structure. Inadequate attention is focused on the policies and disincentives related to the current corporate structure in the U.S.**

While outsourcing production to lower cost countries may make some sense in the short term, evidence suggests that when looked at over a longer timeframe the financial benefits to a particular firm may not be as high as commonly believed. In addition, the longer-term implications of outsourcing on the U.S. economy and its residents are not part of the calculation.

Corporations in the U.S. are run by CEOs who are being rewarded based upon a relatively short-term performance and a narrow definition of return. There is no reward for producing products in the U.S. and, more importantly, no reward for taking a long-term approach to investment in productivity and innovation. In short, there are no incentives for CEOs to change their behavior and invest more in people, communities, and the U.S. manufacturing sector.

- **While most of the public focus has been on large companies, the more than eight million privately-owned, mostly small- and medium-sized companies face a different set of competitive challenges.**

With the crisis in the U.S. auto industry, the focus of attention has been on the large, global, publicly-traded companies. However, there are hundreds of thousands of privately-held, small-and mid-sized manufacturers in the U.S. facing different types of competitive challenges. Many CEOs and managers of smaller privately-held companies need assistance in understanding and addressing these challenges.

- **Current thinking looks to areas of opportunity in certain segments within the manufacturing sector, such as advanced manufacturing. However, in reality, it is more important to focus on the characteristics of the company and its management rather than the industry or market it serves.**

While there is an overall sense that the U.S. is more competitive in "advanced manufacturing," there is no clarity about what is meant by this term. In some ways, the

term advanced manufacturing has become a public relations term--a response to the belief that while we can no longer compete in traditional, low-value-added manufacturing, we can compete in more technology-based and innovation-based manufacturing. In fact, this dichotomy between advanced manufacturing and traditional manufacturing does not represent the competitive environment. What is more relevant is that there are individual firms that can be competitive.

The term "high road" manufacturing, coined by roundtable participants Joel Rogers and Dan Luria, makes a distinction between companies that compete primarily on the basis of low costs — often seeking the lowest cost location for production — and companies that provide higher wages and better benefits, that are environmentally sustainable, and that contribute to the community via purchasing locally. For the most part, these high road companies are competing on the basis of the quality of the product and the value provided through highly-skilled workers and an advanced production process. The high road differentiation, in effect, focuses on the characteristics of the company, not the industry it is in.

Similarly, according to Mark Troppe, the roundtable participant from the federal Manufacturing Extension Partnership (MEP), MEP centers are encouraging individual firms to compete on the basis of high value added, as opposed to price, a losing proposition over the long term. Generally, manufacturers need some distinguishing features, products, or characteristics in order to gain an advantage in the marketplace as "meaningfully unique."

A manufacturer can be meaningfully unique in a number of ways: through creative or efficient design, through the speed by which it gets its product to the customer, through the efficiency of in its production process, and/or through the service and support it provides for its products. In other words, there are many avenues on which to compete successfully beyond the price you charge for the product you are producing or the market you are serving.

- **Many believe that manufacturing related to renewable energy and other green products is a significant area of opportunity for job creation. While this area does offer employment growth potential, there are also competitiveness challenges. Moreover, its full potential may lie in greening more traditional manufacturers.**

There is general agreement that the renewable energy market represents an area of potential opportunity for manufacturing, but one that is potentially facing the same competitive threats from overseas as other sectors. For example, while there are opportunities for creating a domestic supply chain for wind and solar, some of this capacity is already being outsourced to China, which is seeking to become the world leader in wind and solar production technologies. However, there are potentially other energy-related products (i.e., the methane digester) that offer potential and in which the U.S. could become an important player in the development of innovative new energy-related products and processes.

Beyond renewable energy, there are opportunities related to other green products as well as greening the entire manufacturing process and addressing larger community sustainability issues. In addition, the effort to develop competitive strength in green products has refocused some attention on the importance of manufacturing and opened up thinking about new economic growth opportunities. Roundtable participants recognized that further exploration of this issue was needed, and that it should be a priority area for the field and for the foundation.

- **While many manufacturers are concerned about their future pipeline and their ability to fill highly-skilled manufacturing jobs, the reality is that this concern is not leading to rising wages or increased investment by business in skill upgrading and training.**

While practitioners report a gap between the need for skilled manufacturing workers and the supply, some of the roundtable participants noted that if there was really a shortage, the average wage for manufacturing production work would be rising, and this is not the case. The case was also made that the "low road" firms, which are trying to drive down the cost of labor, are having a negative impact on the "high road" firms. Finally, while the level of unionization may be related to some of these issues, its role in the manufacturing sector and the cost of labor has not been adequately addressed.

Manufacturing employers are also not making significant investments in skill upgrading and training of their workforce. Given the competition for workers, many small- and medium-size companies are unwilling to invest in training. Practitioners noted that smaller firms feel that if they do invest in training, their competitors can offer 50 cents an hour more in pay and lure the newly trained employee away. The leadership and the government policies and incentives that are needed to change these attitudes are lacking. In addition, in contrast to healthcare, in manufacturing, companies put little value on certificates or degrees.

Our Policies and Support System Do Not Adequately Address the Current Realities

- **Our understanding of what is going on in the manufacturing sector and its impact on communities and people is shallow, partially as a result of the lack of collaboration among key federal agencies (e.g., BLS and DOC) and the lack of high-level federal agency focus on manufacturing.**

In anticipation of the roundtable, a packet of materials was developed to help frame the discussion. The intent was to gather data and studies that explore the current condition of manufacturing in the U.S., the implications of the current economic downturn for manufacturing, analysis of the most important manufacturing sectors and subsectors and how each is faring, and analysis of the geographic distribution of manufacturing in terms of the metropolitan regions of the U.S. and its cities, suburbs, and rural places. Surprisingly, interviews with those attending the roundtable as well as a literature review

found that there were limited data and analysis available to deepen our understanding of these issues.

For example, there has been little analysis of the distribution of manufacturing by region in the U.S. There is no study that has looked comprehensively at the level of dependence on manufacturing by metropolitan regions and limited analysis of manufacturing trends in urban, suburban, and rural communities. Moreover, there is limited analysis of the competitiveness of manufacturing within subsectors and markets as well as data on the manufacturing supply chain.

Finally, there is little data available that captures the true value of trade coming into the country. Federal agencies tasked with collecting economic data are not set up to measure trade. It is difficult to understand what is fundamentally happening in the manufacturing sector without better and more accurate data on trade flows.

- **The effectiveness of the Manufacturing Extension Partnership, the primary direct federal program that focuses on the competitiveness of manufacturing, is undermined by funding and capacity constraints.**

The MEP program of the US Department of Commerce's National Institute of Standards and Technology (NIST) is the primary vehicle for addressing the competitive issues of manufacturing. This program, however, has some major limitations. Most critically, the legislation requires a $2 non-federal (i.e., state funding, fee-for-service, or other non-federal sources) cost share for every federal dollar spent. While the federal funding for the program is increasing, it has become more and more difficult to secure the matching funds from state partners and manufacturing clients during the recession and the fiscal crisis at the state level. The result is that some centers have laid off staff at a time when there is high need among manufacturers and while federal investment is increasing.

- **Foundations and public agencies are supporting both "low road" and "high road" manufacturing, often without distinction.**

Foundations and public agencies often do not distinguish between "high road" companies that are competing on the basis of other measures than low costs—and as a result are able to provide better wages and benefits to their employees, as well as pursue more sustainable and less wasteful production processes—and those companies that continue to pay low wages and provide few benefits to their employees. For example, because it receives public funding, the federal MEP program must provide some level of service to any US-based manufacturer requesting assistance. It would be possible to set criteria for assistance so that it is mostly dealing with companies that have a good chance of competing successfully or who provide high quality jobs, but most do not segment their market into "high road" versus low road companies. The result is that a portion of MEP funding potentially is spent on helping "low road" companies with poor working conditions, although sometimes it is possible for MEP to help the company see the advantages of high road strategies and assist them in pursuing that approach. Similarly, many foundations do not give adequate attention to the quality of the jobs being created

or accessed through the workforce development and economic development activities that they fund.

Some believe that supporting low road companies that primarily employ low-skilled, low-wage workers is applying downward pressure on high road companies that would like to provide higher wages and benefits. On the other hand, not every manufacturer can afford to pay high wages and benefits. In some sectors, employment in these companies can be part of a pathway to higher paid employment. Some practitioners thought that it might be unrealistic to limit public and foundation investment to only high road companies.

Addressing these concerns requires a clearer rationale by foundations and public agencies about when and how to support "high road" and "low road companies." While in some cases there may be a strategic or tactical reason to support manufacturers that provide lower wage jobs, there needs to be more attention paid to the economic justification of such an approach.

- **The lack of a cabinet-level or major agency at the federal level that focuses on manufacturing is a problem.**

The U.S. government has a Department of Agriculture to address the needs of the agricultural economy and an extensive cooperative extension service primarily focused on agriculture and rural communities. In contrast, manufacturing has received little federal attention beyond the MEP.

- **There is no cohesive network of organizations that represents the multiple interests of the manufacturing sector.**

In housing, there is a large federal presence as well as a large ecosystem of organizations and networks supporting it. In contrast, the ecosystem in manufacturing is not as broad and deep. There is no network advocating for the interests of manufacturing.

There are multiple associations representing the sector, the unions, and policy groups that are focusing on the community and workforce-related impacts of the decline in manufacturing jobs. In addition, there is a handful of successful workforce and economic development projects at the community level working with individual companies around a range of competitiveness issues. However, there is little interaction across these networks that bring these multiple stakeholders together around a common agenda.

- **While a number of states have focused on supporting manufacturing, they continue to compete with each other rather than work collectively on these issues.**

States are major players in terms of efforts to try to address competitive challenges of manufacturing, and some are making major investments either directly through development finance programs and research and development or indirectly through subsidies. However, states are still primarily focused on using incentives and competing

with each other for scarce resources. Their ability to work collectively and move a national agenda forward is limited.

- **Design has not received sufficient consideration as an area of potential opportunity for manufacturing competitiveness.**

In the 1980s, there were many policymakers who looked at the success of manufacturers in Japan and Europe and took away from this the importance of technology and innovative processes, but the role that product design played in the success of the manufacturers was overlooked. The issue is that the focus was on "how we make things," not "what we make." Today, while there is significant attention to design in Asia and Europe, there is less of a focus by manufacturers in the U.S. In addition, there is no federal or state program or policy that provides assistance to manufacturers interested in developing a greater design orientation.

- **With a growing number of manufacturing jobs requiring a higher level of skills, community colleges are becoming important intermediaries. Yet, nationally, much work needs to be done to create an adequate pipeline of highly-skilled manufacturing workers.**

Evidence suggests that even in manufacturing a growing number of workers have some type of postsecondary credential or degree. Work to establish more widely accepted credentials in the manufacturing sector is related to the need for more highly-skilled workers. In this environment, community colleges, which offer both certificate and associates degrees, are becoming more critical components of the manufacturing workforce system.

Although there is work being done regionally and nationally to develop standards and credentials related to skilled manufacturing jobs, considerably more work needs to take place to develop widely recognized credentials and to establish the training infrastructure needed to help individuals attain these credentials. In healthcare, students and parents understand that if you work hard and get a specific credential there will be a quality job at the end. This is not the case in manufacturing. Credentials and degrees in healthcare are widely accepted and are portable as workers move jobs. Again, this is not the case in manufacturing. To change this dynamic, a larger number of firms in the manufacturing sector need to recognize and value manufacturing related degrees and credentials.

IMPLICATIONS FOR THE FIELD

The roundtable discussion elicited a number of recommendations to address some of the challenges and opportunities identified. This section reviews the range of ideas suggested by those involved. The recommendations are organized based upon the strategic intervention areas in which Surdna operates: policy, power, and projects/programs.

Given these recommendations, a potential set of strategies is identified that the philanthropic community and the Surdna Foundation may seek to pursue.

Ideas for Action

Policy

➲ **There is a significant need for investments in data and research to better understand the competitiveness of the manufacturing sector and its impact on communities and people.**

There was a strong consensus that data is critical in order to create good policy. And, participants noted that currently there are considerable gaps in the availability and reliability of data that are needed by researchers interested in better understanding the current state of manufacturing in the U.S. as well as by state policymakers interested in designing appropriate policies.

As a first step in addressing these gaps, there is need for a group of researchers to spend some time outlining what we currently know, what don't we know, what data we would need to collect to fill the gaps, and which federal agencies would need to be involved to put the data together in a form that is useful for researchers and policymakers.

Second, advocacy is needed to get the federal agencies to cooperate more effectively around these data issues and for states to be more open to allowing outside researchers to access their data.

In particular, participants suggested that support is needed to fund the following specific areas of research:

- better data and research on trade flows;
- information on the supply chain for major industries;
- mapping and analysis of key manufacturing clusters;
- analysis of the uncertainties around manufacturing wages and productivity;
- development of new global trade models that are based upon more accurate assumptions about the current political and economic realities;
- research on best practices in manufacturing support programs; and
- research on zoning and land use issues related to manufacturing in our cities.

➲ **There is need for a new vision for trade policy — a policy that is between free trade and protectionism. This could be termed Smart Trade.**

There was broad concurrence with participant Ralph Gomory's perspective that it is critical that we rethink the U.S. policies related to trade. There is the potential to use tax incentives to promote more production in the U.S. New smart trade policies are needed that promote more U.S domestic production and exporting.

Developing a "smart" approach to trade requires some of the academic research and model building noted above. But, as importantly, it requires an education and advocacy effort that seeks to raise this issue in the public domain and amongst our political

leadership. The emphasis needs to be on communication and messaging that moves past current debates and, using new models, reframes the conversation around a new conceptual framework that builds resilience, sustainability, and equity into the system.

- **The legislation and policies that relate to the MEP should be reviewed and efforts should be made to address the immediate issues related to the state funding gap.**

The MEP remains the primary national program that has its mission addressing the competitive challenges of manufacturing. This program is hampered by the requirement of $2 in non-federal funding for every federal dollar in the program. It has been increasingly difficult for MEP to get the states and manufacturers to provide the cost share during the recession, leading to declining services in various locations around the country in terms of the MEP program. Moreover, there is some concern that the MEP does not have standards related to the type of firms with which it will work.

Given these issues, it might be time for a review of the MEP legislation and funding and to make refinements that would ensure that it remains a strong and innovative service provider. Reauthorization of the America Competes Act this year provides a timely vehicle for consideration of such changes.

Power

- **There is need for a new intermediary or network to convene the key stakeholders interested in policy and practice related to manufacturing.**

Research and analysis are not enough. An intermediary is needed to translate the theory for the public and policymakers.

The political system is slow to absorb innovation emerging from the intellectual ecosystem. It is important that those concerned with the future of manufacturing think about how theory translates into political action. What is needed is a bridge between the academic community and the policy community. While there is a large network of think tanks, there are no institutions with a specific and defined manufacturing focus that brings together employers, investors, unions, policymakers, and academics.

A related need is for increased opportunities for networking amongst the stakeholder community, including conferences, a website, and specialized convenings.

- **There is a need to enhance the engagement of employers in workforce-related issues in manufacturing.**

There are a number of associations that represent manufacturers and each of these has taken on some workforce-related issues. Working together, they could raise the visibility of these issues nationally. For example, they could make the case for the importance and value of non-degree certificates.

Beyond raising the issues, the high road manufacturers should be involved in making the case for the value of highly-skilled workers and for the "common" benefits associated with enhanced standards and credentials.

Projects/Programs

- **There could be support for innovative community manufacturing projects that could be taken to scale.**

There are a number of innovative efforts to address the needs of manufacturers in communities around the U.S. Some of the practitioners present at the roundtable and who represent these efforts, such as Wire-Net in Cleveland, Worldwide Industrial Network in Pittsburgh, the Chicago Manufacturing Renaissance Council, and the New York Industrial Retention Network, believe that there is a need for enhanced support of such efforts. Creating a national network of similar organizations that focuses on peer learning, the dissemination of practice, the collection of relevant data, and the establishment of metrics for the field could help to bring some of this activity to scale nationally.

- **State-level policy and innovation around manufacturing competitiveness should be further promoted.**

As noted in the roundtable, states have become key players in this field. While some of the states most impacted by declines in manufacturing have been trying to develop a cohesive policy approach, the competitive environment makes it difficult for states to cooperate or to develop a shared advocacy strategy. A targeted effort, which works with a small group of states, could help each state to establish more effective programs and projects to support manufacturing as well as help to build a new voice in the national debate.

- **A range of potential programs and projects could help to bring the existing workforce and training infrastructure for manufacturing to the next level.**

Innovative efforts should be explored that transform the approach to training, particularly for 18- to 25-year-olds, to quickly create a highly-skilled workforce for manufacturing. As just one example, a couple of the participants of the roundtable noted that the training techniques of the U.S. military should be explored as a model. Others focused attention on the need to create more nationally recognized credentials in manufacturing and to develop clearer pathways for advancement.

Opportunities for the Philanthropic Community

There was strong consensus among those attending the roundtable that the Surdna Foundation could play an important role in bringing fresh thinking, new resources, and new capacity in the efforts to address the future of manufacturing in the U.S. However, given its multiple agendas, Surdna cannot address all of the recommendations that were voiced during the roundtable. What follows are some specific actions and investments

that the foundation community and the Surdna Foundation can take to move the agenda forward.

Beyond the Money

➲ **Sponsor a series of convenings that take the roundtable work to the next level.**

- *Convene researchers to set the data and research agenda.* As noted, there are numerous data and research needs. The first step, however, is to clearly outline what we already know; what we don't know, and what we need to know for good policy; the data that are required; and who should be responsible for collecting and disseminating this data.
- *Convene the foundation community.* Surdna can take the lead and help to bring other foundations to heighten the level of debate, support research, and engage key actors around manufacturing-related issues.
- *Convene the key stakeholders who could be involved in creating a new coordinated advocacy strategy.* Taking advocacy work to the next level will require either a new organization or tasking an existing organization with this role. Surdna can play a role in helping to facilitate a process that focuses on how to move the advocacy agenda forward.
- *Reconvene the roundtable group twice a year.* Those involved in the roundtable thought that annual or semi-annual meetings could be convened to discuss progress on some of the larger recommendations and identify new areas of potential opportunity to guide Surdna's investment strategy in this area.

➲ **Develop a communication and learning site.**

As part of the roundtable, Surdna developed the beginnings of what could be an ongoing communication and learning site for those interested in manufacturing. Surdna can continue to host this site and post relevant materials.

Funding

➲ **Seed a new manufacturing R&D fund.**

Once the data and research needs are established and the foundations are convened, Surdna can play a role in creating a new fund, the purpose of which is to support new data and research related to manufacturing.

➲ **Support a new network and learning exchange.**

In the past, there were networks where those involved in operating programs and projects related to manufacturing could meet and exchange ideas. There is no such vehicle in place now. The practitioners in the room noted this void. Such a network would have to cross economic development and workforce development boundaries and support a learning agenda. Surdna could be the seed funder of such an effort.

➲ **Support an advocacy effort.**

Depending upon the outcome of the convenings noted in "Beyond the Money," Surdna could also provide seed funding and support for an existing entity or new entity to develop a more cohesive and deliberate advocacy effort. This effort would also incorporate the new research that is being supported.

- **Develop a "Manufacturing and Communities Innovation Project."**

There are a number of innovative existing efforts around the country that have focused on strengthening the manufacturing sector in a specific community. Surdna can consider funding six to eight projects in this general area. These projects would all be responsible for collecting common data sets on their activities and engaging in a learning community to bring practice to the next level. Outcomes and learnings from this effort could then be disseminated in the field.

- **Support state pilot projects that integrate green jobs, design, and manufacturing.**

Surdna could identify three to five states that are interested in developing state policy approaches to support manufacturing in their states or could issue an RFP to solicit interest. These efforts should focus on the intersection of the programmatic areas of Surdna — strong local economies, thriving cultures, and sustainable environments. For example, the initiative could support efforts around design, green jobs and manufacturing.

Surdna Manufacturing Roundtable Attendee List	
Name	**Organization and Title**
Adam Friedman	Director, Pratt Center for Community Development
Mark Troppe	Manager, Strategic Partnerships and State Relations, NIST Manufacturing Extension Partnership
Barry Maciak	Managing Partner, World-Class Industrial Network
Jim Jacobs	President, Macomb Community College
Eric Mittelstadt	CEO, National Council for Advanced Manufacturing
Dan Luria	Research Director, Michigan Manufacturing Technology Center
Joel Rogers	Founder and Director, Center on Wisconsin Strategy
Stuart Rosenfeld	Principal and Founder, Regional Technology Strategies
Howard Wial	Fellow, Metropolitan Policy Program, Brookings Institution
John Colm	President, WIRE-Net
Dan Swinney	Executive Director, Center for Labor and Community Research
Ed Murphy	Executive Director, Workforce Development Institute, AFL-CIO
Susan Houseman	Senior Economist, W.E. Upjohn Institute
Gary Gereffi	Director, Center on Globalization, Governance & Competitiveness, Duke University
Jacques Koppel	President, Koppel Group LLC
Ralph Gomory	Research Professor, Stern School of Business, New York University
Sarah Wartell	Executive Vice President, Center for American Progress
Michael Kane	Consultant, Mt. Auburn Associates
Beth Siegel	Consultant, Mt. Auburn Associates
Phil Henderson	President, Surdna Foundation
Larry Griffith	Board Member, Surdna Foudnation
Michael Spensley	Board Member, Surdna Foundation
Bruce Abernethy	Board Member, Surdna Foundation
Sharon Alpert	Program Director, Sustainable Environments, Surdna Foundation
Kim Burnett	Program Director, Strong Local Economies, Surdna Foundation
Jee Kim	Program Director, Foundation Initiatives, Surdna Foundation
Ellen Rudolph	Program Director, Thriving Cultures, Surdna Foundation
Helen Chin	Program Officer, Sustainable Environments, Surdna Foundation
Jasmine Thomas	Program Officer, Strong Local Economies, Surdna Foundation
Kim Musler	Program Associate, Strong Local Economies, Surdna Foundation
Andrew Ehrich	Fellow, Surdna Foundation
Beth Herz	Program Associate, Sustainable Environments, Surdna Foundation

ANNOTATED AGENDA

SESSION ONE — TUESDAY EVENING, JANUARY 12 6:30P.M-8:30PM

1. The Surdna Context

There will be a short introduction by Surdna staff and Board on the goals of the Roundtable and the Foundation's mission and approach.

2. Introductions

We will ask participants to introduce themselves, and also highlight one critical point they want to make about U.S. manufacturing.

3. Small Group Discussions over Dinner on the Justification for Targeting Manufacturing

Format

Attendees are asked to read several articles in advance. We will ask everyone to discuss the articles over dinner, at their respective tables, and report to the larger group about the major reasons that Surdna should target some resources to the manufacturing sector.

Key Discussion Questions

- Is manufacturing too big to fail, or is it a sector that will inevitably shrink and decline?
- Are there opportunity costs in trying to retain manufacturing?
- Should we just focus on R&D and design or do we still have to make things?
- Does manufacturing make a difference to regional economies, the U.S. economy, municipal and metropolitan economies, and the lives of working and poor people?
- What additional questions do we want to address on Wednesday?

SESSION TWO : WEDNESDAY MORNING 8:30 - 10:00

What are the most important competitive challenges facing U.S. manufacturing, and what are its competitive advantages?

Format

We will start with a short framework that highlights some of the key competitive challenges faced by manufacturers and some potential areas of competitive advantage.

Key Discussion Questions

- What is behind the downturn in employment in manufacturing?
- Where is the U.S. competitive advantage?
- How do the challenges differ in terms of the different segments of manufacturing? Are there certain segments of manufacturing that are doing better and that have particular advantages?

- Where is the intersection between energy and environmental concerns and manufacturing? Is this an area of U.S. competitive advantage?
- Where is the intersection between design and innovation and manufacturing? Is this an area of U.S. competitive advantage?
- Are there certain regions of the U.S. in which manufacturing is more competitive? If so, where and why?
- What has been the role of unions in addressing the competitiveness of manufacturing?

Outcomes

- A refined understanding of the key competitive advantages that could be built upon.
- A refined list of the key barriers that need to be addressed.
- Identification of some potential areas of opportunity that can be explored later in the day.
- Identification of additional questions or information needs.

SESSION THREE: WEDNESDAY MORNING 10:15 – 12:00

Are there quality jobs available in manufacturing, and how effective is the system at preparing people for those jobs?

Format

There will be a short overview that highlights the manufacturing workforce, major occupations, wages, and trends, as well as the key issues and needs around workforce

Key Discussion Questions

- What are the major workforce-related challenges — gender, immigrants, an aging workforce, bringing young people into the sector?
- Are there still job opportunities, even if the sector continues to decline?
- How does the current workforce system work in terms of addressing the needs of the manufacturing sector?
    - What is the role of credentials?
    - What role does the K-12 education system play?
    - What is the role of community colleges?
    - What is the role of the public WIA system?
    - What are the implications in terms of the use of staffing/temporary agencies
    - Is the image of manufacturing a serious barrier to workforce development?
- What are best practices in terms of sector workforce programs, vocational education, and community colleges?

Outcomes

- Identification of potential programmatic and policy interventions to target job opportunities to communities and individuals.
- Identification of potential best practices.
- Implications for Surdna

SESSION FOUR: WEDNESDAY AFTERNOON 12:30 – 2:00

What are the strengths and gaps in the existing manufacturing support system?

Format

There will be a brief overview of major federal, state, and local programs that are addressing the barriers that were discussed earlier.

Key Discussion Questions

- What is the current status of U.S. manufacturing policy and practice?
  - How does this relate to the industrial policy debate?
  - What have we learned through the MEP and other programs about working with manufacturing companies?
- Who are the major players at the state and local levels and what are they doing?
  - Are there certain states and/or metro areas that have targeted manufacturing? How successful have they been?
  - How are the financing challenges of manufacturers being addressed?
  - What role does land-use play?
  - How effective are existing programs that target manufacturing?
  - What are model or best practice programs?
  - How can programs be brought to scale?
- What is the philanthropic community doing?
- What is the role of higher education or other anchor institutions?
- What are the drivers and levers of change?
- What are the implications for Surdna?

Outcomes

- Identification of potential "gaps" that need to be addressed.
- Better understanding of the landscape to provide context for any intervention.
- Identification of some best practices.
- Identification of communities and/or states that are already along this pathway.

SESSION FIVE: WEDNESDAY AFTERNOON 2:15 – 4:00

What are the areas of opportunity, and what role should/could Surdna play?

Format

Participants will be asked to present in 5 minutes how they would spend $10 million over a five-year period to impact manufacturing. The questions will be:

1) What, if any, segments would you (participant) target?
2) What type of community or region would you target?
3) What existing programs or projects would you bring to scale?
4) What new programs or projects would you fund?
5) What role would you/your organization play, if any, in terms of the larger macro issues?
6) What specific competitiveness issues would you consider focusing on (i.e. innovation, design, workforce, finance, etc.)?
7) Who else would you involve in these activities? Other foundations? Other organizations?
8) What, if any, research and policy activity would you support?

Surdna staff/board respond and pose any additional questions or issues.

Outcomes

- Preliminary ideas of areas of opportunity to focus on in terms of segments of manufacturing, issues within manufacturing, and geographic areas.
- Identification of where additional information and research may be necessary.