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Email Correspondence

Date: Feb. 28, 2022

To: Governor’s Council on Economic Expansion

From: Jason Robinson, Agricultural Utilization Research Institute

Re: Governor's Council on Economic Expansion Opportunities, specifically related to Food and Beverage Manufacturing (F&BM)

Good afternoon –

My name is Jason Robinson, Business Development Director – Food, for the Agricultural Utilization Research Institute. We are a state-funded nonprofit corporation focused on driving utilization of MN’s agricultural products. I am writing to specifically highlight a newly published report co-funded by the MN Dept of Ag and AURI, focused on defining the current state of Food and Beverage Manufacturing in MN.

This report stems from anecdotal evidence that Food & Bev entrepreneurs are unable to effectively scale their business in MN, and are thus forced to abandon their plans to scale, leave the state, or to fold as a business altogether. Thus, this report focused on validating the problem statement of “there isn’t enough right-sized affordable and accessible manufacturing capacity in MN to support scaling brands.”

Here is the press release for the report: https://auri.org/auri-news/2022/02/24/auri-publishes-report-on-minnesotas-food-and-beverage-manufacturing-industry/

Here is a link to the published report itself: https://auri.org/research-reports/food-beverage-manufacturing-report/

There are 2 key takeaways from this report, laid out in the executive summary:

1. **Minnesota can unlock significant Gross Domestic Product (GDP) growth through investment in F&BM**, which appears to be an untapped (or under-tapped) driver of growth for Minnesota’s economy. Analysis indicates F&BM generates the highest overall returns of any industry in the state, with a **5% gain in manufacturing output yielding over $11 billion in impact to the state’s GDP** and an additional (estimated) 167,822 jobs.

2. **Brands and manufacturers appear to have difficulty finding one another, and, once connected, have difficulty creating mutually beneficial relationships.**

There is significantly more detail in the report with a very extensive economic analysis.
Now that we have finalized the justification for further work through this economic analysis, AURI and MDA are currently leading a diverse team to understand what is needed to realize the economic benefits outlined in the report. AURI would appreciate a chance to share this information with the Governor’s Council, and brainstorm how this data can be used to shape future policy to support MN’s homegrown food and bev businesses to realize the potential economic growth highlighted.

I’m excited to share more!

Jason Robinson  
Business Development Director - Food
Email Correspondence

Date:     Dec. 15, 2021

To:       Governor’s Council on Economic Expansion

From:     Jen Owens

Re: Inquiry

Good afternoon,

Thank you for that and I will reach out to the members. I wish I could get appointed by Gov. Walz. The greatest issue affecting Minnesotans is Trafficking in Persons (TIP) per the US Department of State TIP Report. This issue is out of control and perpetrators of this have not been held accountable. This is a serious attack. I am good with economic growth and want to talk about businesses I am designing to address pressing, disruptive issues in federal efforts.

Please get back to me at your earliest convenience....

Best,

Jen Owens
Email Correspondence

Date: Dec. 1, 2021
To: Governor’s Council on Economic Expansion
From: Jen Owens

Re: Inquiry

Greetings,

I was reading the Governors EO. I want to be involved in the council and get my business supported. Can someone please get in touch?

I look forward to response...

Best,

Jen Owens
Written Public Comment

Date:   Nov. 16, 2021

To:     Governor’s Council on Economic Expansion

From:   Michele Anderson

Comment:

As someone who works in mental health care and crisis stabilization, I believe the monies would be better spent on workforce training and pay, increased children/adolescent crisis beds, increased respite for both children/adolescents and adults. Please consider this.
Email Correspondence

Date: Nov. 16, 2021

To: Governor’s Council on Economic Expansion; Elizabeth Frosch

From: Rosa Tock

Re: Memo to members of the Council on Economic Expansion

Dear members of the Council on Economic Expansion,

Please find attached additional recommendations to the Council as you finalize Phase 1 of prioritizing strategic topics and will soon start Phase 2 of your work.

Thanks for your time and consideration.

Best,

Rosa Tock
Executive Director
(she/her)

Minnesota Council on Latino Affairs
Centennial Office Building (COB)
As the work of the Council on Economic Expansion moves to Phase 2 after finalizing recommendations to Governor Walz and Lt. Governor Flanagan, the Council would like to make additional recommendations to address critical issues for an equitable economic expansion.

With the negotiations for the supplemental budget expected to be held in 2022 and $1.150 Billion in American Rescue Plan (ARP) funds, the Council recommends equitable funding for Latinx communities in priority areas such as support of immediate economic stabilization for households and businesses, and addressing public health and economic challenges that have contributed to the unequitable impact of the pandemic.

Below you’ll find some recommendations:

1.1. Addressing mental health issues in the Latino community for a healthy workforce.
- Allocation of $20 million to the DHS’ program “School-Linked Mental Health Services”. Reducing barriers through placing mental health services through schools, this program provides a great opportunity for mental health promotion, prevention and early identification and intervention.
- Ensuring that mental health is covered by insurance companies, particularly during and after the pandemic. This can be done allocating federal dollars to subsidize costs.
- Significant investment in mental health awareness and education programming to reach Latinx communities – this can be done through non-profits and other agencies that service Spanish-speaking Minnesotans. Allocating ARP money for grants to ensure that Latino Minnesotans are informed about mental health issues and resources available. Anxiety, substance abuse, youth risky behaviors, depression, and long COVID symptoms are some of the most predominant issues mentioned by health care providers and community members.
- Mental health awareness campaign through Spanish media. In addition to non-profit grants, investing in a Spanish media campaign to inform Spanish-speaking Minnesotans of state and other resources available to address mental health issues.

1.2. Benefitting the hardest hit by the pandemic.
- Frontline Workers’ Pay: to cover food workers and those not eligible for federal assistance by allocating additional money for those not covered in 2021, in particular those working in meat-packing plants and other food service facilities, and janitors.
- Additional tax credit(s) for low-income Minnesotans, based on tax return information, including ITIN holders. Creating a new tax benefit for those earning below $35,000 (ensuring that Food
workers are covered) in order to offset their exclusion from the Frontline Worker Bonuses paid by the state. This option can be paid with federal dollars.

- Working women and families. Latina leaders have identified the lack of visibility of working women and families in policy and budget prioritizations to support their financial stability. Talking with advocates and others in the community to elevate these issues and/or support their legislation is a unique opportunity. Women, like BIPOC people, suffered from job loss and are among the hardest hit by the pandemic.

1.3. Migrant Workers Housing

There have been some petitions to invest ARP funding for housing stabilization and affordability in the metro area, but there is a continued need to address the housing problems that agricultural and food processing workers experience in the Greater Minnesota. According to MCLA’s community listening sessions over at least the last decade, and a recent survey by the Migrant Consortium (a group of state agencies and community members servicing migrant workers), lack of housing close to work, lack of affordable housing, and lack of short-term housing leases along with poor housing conditions that are not safe or healthy, threaten the wellbeing of these workers and their families, and thus, impact the immediate economic recovery of the state. Considering investments similar or equal to what the Metropolitan Consortium of Community Developers or the Minnesota House and Senate Committees on Housing Finance and Policy are requesting to the Council on Economic Expansion would be a positive step towards closing the urban/rural gap in access to affordable housing.

1.4. Expansion of health care coverage for undocumented individual and families

MCLA supports the petition of immigrant led organizations requesting $50 million over two years for additional health care coverage and pandemic disaster relief assistance for undocumented Minnesotans. Undocumented immigrants are currently ineligible for Medical Assistance and MinnesotaCare. Their COVID-treatment may be covered by Emergency Medical Assistance when they are severely ill and require hospitalization, but affordable, comprehensive care to increase early detection, avoid worsening health, and manage the long and complicated recovery that can follow COVID-19 remains inaccessible. Undocumented Minnesotans and their families are also excluded from unemployment benefits. Both exclusions have contributed to the high level of exposure, illness, and death in immigrant communities.
Email Correspondence

Date: Nov. 15, 2021
To: Governor’s Council on Economic Expansion
From: Julie Bluhm

Re: Mental health needs in MN

Dear Committee,

I am excited you are actively discussing the needs for additional mental health and addiction resources in Minnesota. As a service provider and member of the MN Mental Health Legislative Network, we have long advocated for additional resources and needs and have agreed on the following as critical needs:

- **Respite care.** Families of children are really struggling especially after a year of distance learning. Increase the funding for respite care and consider adding respite care for parents who are living with a mental illness and are nearing a crisis.

- **Workforce.** We know some of the funding is to be directed towards workforce. You may need to check with MDH to see if some of the funds are flowing to them. You can use the money for paying for CEUs to help BIPOC MH professionals become supervisors, subsidize supervision at mental health centers, pay for cultural healers, pay for training on EBP and for training on cultural competence, humility and informed, and expand the loan forgiveness program. This funding could also be used to expand the peer recovery workforce, push for dual certification, and create youth peer mentors. Funds could also be used for recruitment and retention.

- **Fund mental health education, support, and advocacy.** NAMI, MHM, MACMH, WITW are the major mental health advocacy organizations. Increase our funding to allow us to meet the needs. This includes family education, peer education, peer led support groups (for individuals with mental illnesses, parents, family members, professionals struggling etc.), helplines, warmlines, peer-to-peer support (individuals with mental illnesses and family members), mental health first aid and other public awareness activities. During the past year NAMI has reaching thousands of employees providing education on mental wellness during COVID and accommodations for people struggling. We have all struggled with funding as well during a pandemic, saved largely by PPP loans, but those won’t be available in the future.

- **Children’s crisis homes.** The lack of beds right now is placing a huge strain on ERs, children and families. Work with some larger providers to create crisis homes or beds in facilities for those children who cannot find a hospital bed or are denied care to lack of beds but cannot safely go home. Work to design a long term payment mechanism.
• Voluntary engagement. This new part of the commitment bill could truly help avoid commitments, hospitalizations and contact with the criminal justice system. Fund some pilots so we can assess their effectiveness. We also have had an increasing number of calls where such a program could have enormous impact in engaging people with psychosis in treatment.

• First Episode: Fund new First Psychotic Episode programs and fund the new Mood Disorder Program. (psychosis has increased among young adults)

• Flex Housing Funds: There is a need for training providers of housing supports how to get clients on MA to pay for the new program along with having some flex funds (that were used under the HSASMI grants) to pay for application fees, etc., to get people into housing.

• IT. Fund infrastructure costs for IT especially related to electronic medical records and telehealth

• Competency Restoration: Fund forensic navigators, community competency restoration programs, locked IRTS.

• Rates. Temporarily increase outpatient rates, and inpatient psych unit rates.

• TCM: Use funds for contracted provider relief subsidy

We are aware that Allina has been working to build a connection center in Anoka to meet additional needs for connection and navigation of the mental health and addiction systems. We are supportive of this project, at the same time, would hope that the experts on Mental Health be included in the room and in the discussion before this is created as a statewide solution.

Thanks,

Julie Bluhm

she / her / hers
Chief Executive Officer
Guild
Email Correspondence

Date:  Nov. 14, 2021

To:  Governor’s Council on Economic Expansion

From:  Jode Freyholtz-London

Re: Mental health needs

Good day, I am writing as the Executive director and founder of Wellness in the Woods. We employ 46 individuals as peer specialists with lived mental health and or substance use challenges to provide mental health and substance use education, the statewide warmline and a daily virtual peer support network. We would like to see additional funding to continue our work in advocacy, education and peer support as you review the needs of MN.

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Jode Freyholtz-London

Executive Director Wellness in the Woods
Email Correspondence

Date: Nov. 9, 2021

To: Governor’s Council on Economic Expansion

From: Sue Abderholden

Re: MH Recommendations

I was absolutely surprised to learn of the recommendation related to expanding the mental health system as part of the council report. I will say that it was very hard to track down the actual recommendation which is disappointing in terms of transparency. This idea has not been shared with the mental health community and NAMI Minnesota was not brought into this conversation and would not support this proposal. To discuss the infusion of millions of dollars into our mental health system without talking to or involving the mental health community is really quite disappointing. The mental health community, through the Minnesota Mental Health Legislative Network, a coalition of over 40 mental health organizations (providers, professionals, and advocates) has already submitted (numerous times) how we believe one time could be spent to have an actual impact on the unmet needs of children and adults with mental illnesses and their families. Every year we go to the legislature with a long list of ideas that could help us continue to build the mental health system at all levels of intensity, in all areas (education, criminal justice, housing, etc.) and addressing workforce shortages.

I urge the council to not include the recommendation related to mental health. It is not supported by the community.

Sue Abderholden, MPH
Executive Director
NAMI Minnesota
Written Public Comment

Date: Nov. 9, 2021

To: Governor’s Council on Economic Expansion

From: Sue Abderholden, NAMI Minnesota

Comment:

I have heard that the council is developing a proposal around mental health. I was surprised to learn this since there has not been any communication with the mental health community.
Written Public Comment

Date:   Nov. 9, 2021

To:   Governor’s Council on Economic Expansion

From:   Sue Abderholden, NAMI Minnesota

Comment:

I just listened to the tape and heard the idea. Do you know about CCBHCs? Do you know that MH is Health Care? We would not support this recommendation.
Email Correspondence

Date: Oct. 29, 2021

To: Governor’s Council on Economic Expansion; Jeff Ettinger

From: Kingshuk K. Sinha

Re: Letter to the Members of The Governor's Council of Economic Expansion and the Proposal for a "Center of Excellence for Advancing DEI in Supply Chains" are attached

Please find attached: (i) a letter to the members of The Governor's Council of Economic Expansion and (ii) the proposal for a "Center of Excellence for Advancing DEI in Supply Chains."

Thank you for your attention and consideration.

Respectfully submitted,

K. K. Sinha

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Kingshuk K. Sinha
Chair and Professor, Supply Chain and Operations Department &
Elmer L. Andersen Chair in Sustainable Supply Chain
October 29, 2021

To:
Jeff Ettinger, Former Chairman of the Board and CEO, Hormel (Co-Chair)
Paul Williams, President and CEO, Project for Pride in Living (Co-Chair)
Scott Burns, Co-Founder and CEO, Structural
Brett Carter, Executive Vice President, Chief Customer & Innovation Officer, Xcel Energy
Joe Fowler, President, Minnesota Building and Construction Trades Council
Jodi Hubler, Vice Chair, Medical Alley Board of Directors
Brenda Hilbrich, Executive Vice President, SEIU Healthcare Minnesota
Neel Kashkari, President and CEO, Federal Reserve Bank of Minneapolis
Marcus Owens, Executive Director, African American Leadership Forum; Linking Leaders
Tuleah Palmer, President and CEO, Blandin Foundation
Joo Hee Pomplun, Executive Director, Alliance for Metropolitan Stability
Nonoko Sato, Executive Director, Minnesota Council on Nonprofits
Traci Tapani, Co-President, Wyoming Machine
Bharti Wahi, Executive Director, Children’s Defense Fund
Penny Wheeler, CEO, Allina Health

Dear Esteemed Members of the Governor’s Council of Economic Expansion:

This is pursuant to my email dated October 5, 2021 included in “Written public comments” under the section “Resources” on the website for The Governor’s Council on Economic Expansion.

It is with great interest and enthusiasm I have followed the deliberations of the council’s meetings to date via: (i) the recordings and (ii) the minutes of the meetings posted on the council’s website. I have found the recordings and the minutes to be both informative and inspiring.

In particular, with reference to the materials of Meeting 6 on October 18, 2021 whose objective was to “understand the impact of the pandemic’s effect in underrepresented communities, confirm guiding principles, and identify themes for recommendations,” I have reviewed carefully the specific “Themes/Priorities” (p. 3-7) that have emerged which include:

- “Cultural communities (Culturally-specific delivery),”
- “Workforce (expansion, reskilling, career paths),”
- “Entrepreneurship and small businesses,”
- “Health care,”
- “Rural communities and Greater Minnesota,” and
- “Youth employment and engagement.”
Most respectfully, I submit to you the proposal for a sustainable solution that cuts across the above stated “Themes/Priorities.” Please find attached the proposal to create a Center of Excellence (COE) for Advancing Diversity, Equity and Inclusion in Supply Chains. The proposed Center of Excellence will nurture and advance public-private partnership across three areas of focus:

(i) Education,
(ii) Learning Community Network, and
(iii) Evidence-Based Advocacy & Public Policy
to enable the BIPOC small business owners develop capabilities to compete successfully and grow their businesses in the key supply chains that serve as the bedrock of Minnesota’s economy:

- Medical device and health care supply chain,
- Food and agribusiness supply chain,
- Retail supply chain, and
- Global manufacturing supply chain

If you believe that the proposed Center of Excellence (COE) for Advancing Diversity, Equity and Inclusion in Supply Chains has the potential to contribute towards achieving the objectives of the Governor’s Council of Economic Expansion, please let me know. Your guidance in shaping the Center of Excellence and its direction would be most welcome.

Thank you for your attention and consideration.

Sincerely,

Kingshuk K. Sinha, Ph.D.
Professor and Chair, Supply Chain and Operations Department, and
Elmer L. Andersen Chair in Sustainable Supply Chain
Carlson School of Management
University of Minnesota

E-mail: ksinha@umn.edu

Attachment: Proposal for the Center of Excellence (COE) for Advancing Diversity, Equity and Inclusion in Supply Chains
Carlson School of Management

Center of Excellence for Advancing Diversity, Equity and Inclusion in Supply Chains

October 2021
Center of Excellence (COE) for Advancing Diversity, Equity and Inclusion in Supply Chains

- University of Minnesota is a land-grant university. The Carlson School of Management stands for the belief that “business is a force for good.” Building on the foundational principles of the university and the Carlson School, COE serves as a convener, an educator and a resource to support the building of a more inclusive society.

- COE is committed to providing free and low cost resources, and education to support the growth of BIPOC owned small businesses.

- COE’s objective is to address the two-sided challenges of developing the capabilities of BIPOC small business owners who are suppliers to Minnesota based companies.
COE’s Value Proposition

COE will nurture and advance public-private partnership across three areas of focus:

- Education
- Learning Community Network
- Evidence-Based Advocacy & Public Policy

• Focusing on what we at the Carlson School of Management do best is a key component for success.

• Utilizing a combination of symposiums, workshops, certificate and a specialty degree to enable the BIPOC small business owners develop capabilities to compete successfully and grow their businesses in the key supply chains that serve as the bedrock of Minnesota economy:
  - Medical device and health care supply chain
  - Food and agribusiness supply chain
  - Retail supply chain
  - Global manufacturing supply chain
COE’s Three Strategic Areas of Focus

• **Education – Dismantling the capability barriers that hold minority business owners back**: We believe that substantively purposeful education can be the catalyst for change. Challenging biased narratives by building competencies that enable BIPOC small business owners to have “a seat at the table.” Organizing symposiums and capability-building workshops, and providing scholarships designated for BIPOC small business owners will help in providing the resources to build competencies and in gaining the confidence to effectively pursue rewarding growth opportunities as they arise.

• **Learning Community Network – Creating learning and knowledge sharing opportunities for like-minded BIPOC small business owners to engage with faculty**: We believe in taking important steps to expand the horizon of BIPOC small business owners’ power and influence. We have an ecosystem of committed partners that we can mobilize through events and classroom activities to learn, share and network.

• **Evidenced-Based Advocacy & Public Policy – Calling society to action**: We are uniquely positioned to be a neutral partner and a hub that can guide advocacy and public policy initiatives informed by evidence that is derived from rigorous research studies. We are committed to serving as a resource for both public and private organizations to help guide evidence-based actionable change that will eliminate social and economic inequities, and foster growth and prosperity in the community.
COE’s Initiatives and Deliverables

Education
1. Organize symposiums to provide an opportunity for BIPOC small business owners to meet other like-minded business owners and faculty with relevant expertise, engage with large corporations and gain new insights into business development and growth.

2. To build upon the symposiums, organize capability development workshops that will delve into specific targeted areas.

3. Provide advanced educational opportunity by offering to BIPOC small business owners fellowships to pursue a one-year, cohort-only Master in Supply Chain Management program.

Learning Community Network
1. Symposums will provide opportunities for BIPOC small business owners to learn, share and network with our partner organizations in the public and private sector, and faculty with relevant expertise.

2. Carlson School’s advisory board member organizations represent many of the large companies in the region, and the school is committed to creating experiential learning opportunities for BIPOC small business owners.

3. Being an “alumnus” of a Carlson School program includes being a part of the life-long learning community consisting of 55,000+ others, and having access to all of the resources provided to alumni.

Evidence-Based Advocacy & Public Policy
1. COE is uniquely positioned as a neutral partner to conduct research and provide evidence-based research findings to community stakeholders to understand the value of BIPOC owned small businesses.

2. Through roundtable discussions with governmental agencies, large corporations and community organizations, COE is committed to reporting new research findings on actionable changes that will eliminate social and economic inequities.
The Supply Chain and Operations Department was established in 1988. Faculty = 14; Professional Directors = 2; Staff = 3

Center of Excellence (COE) for Advancing Diversity, Equity and Inclusion in Supply Chains
Core Faculty: Supply Chain and Operations Department, Carlson School of Management
Email Correspondence

Date: Oct. 5, 2021
To: Jeff Ettinger
From: Kingshuk K. Sinha

Re: Governor's Council on Economic Expansion -- Following up on our brief meeting on Sept. 20 after the class you co-teach with Mark Bergen

Dear Jeff:

Hope you are doing well.

This is to follow up on the brief meeting we had after the class you co-teach with Mark Bergen on Monday, September 20. As you might recall, during the meeting I expressed my appreciation and enthusiasm to you on learning from Mark that you are co-chairing the Governor’s Council on Economic Expansion and took the liberty of sharing with you a folder containing documents outlining the ongoing efforts of our Supply Chain and Operations Department at the Carlson School that are relevant to the mission of the Council evidenced by the text from the two paragraphs (below) excerpted from the Governor's Executive Order 21-31.

"Building incentives and access to capital for entrepreneurs of color, Indigenous entrepreneurs, and historically underserved groups will improve our business climate." (para 1 below)

"Many key partners—including tribal, state, and local governments, businesses, workers, higher education institutions, nonprofits, grassroots movements, and communities—have valuable insights that will help us achieve our goals. By working together to intentionally rebuild our economy, we will better serve all of the people of Minnesota." (para 2 below)

Our economic recovery from the pandemic presents unique opportunities to build a stronger Minnesota. Empowering small business growth and workers is critical to this work. Fostering a strong innovation ecosystem, including through partnerships with the nonprofit sector, will bring jobs with long-term potential to our state. Building incentives and access to capital for entrepreneurs of color, Indigenous entrepreneurs, and historically underserved groups will improve our business climate. This work will send a message to businesses and talent around the world that Minnesota has a thriving economy that will emerge even stronger on the other side of this pandemic.
Many key partners—including tribal, state, and local governments, businesses, workers, higher education institutions, nonprofits, grassroots movements, and communities—have valuable insights that will help us achieve our goals. By working together to intentionally rebuild our economy, we will better serve all of the people of Minnesota.

For ease of reference, attached are electronic versions of the three documents in the folder I shared with you during our brief meeting on Sept. 20.

I would appreciate an opportunity to meet with you at a mutually convenient time and date to learn more about the Council's efforts, and receive any guidance as to how we can be of help in advancing the Council's efforts.

Looking forward to hearing from you.

Sincerely,

KK

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Kingshuk K. Sinha
Chair and Professor, Supply Chain and Operations Department & Elmer L. Andersen Chair in Sustainable Supply Chain
COVID-19 AND ITS IMPACT ON SUPPLY CHAINS

The discussion on the “COVID-19 and Its Impact on Supply Chains” at the Carlson School of Management’s Supply Chain and Operations Board of Advisors meeting on October 22, 2020 was focused on the following three questions:

1. Challenges/Opportunities:
   What are the top supply chain management challenges and opportunities due to COVID-19 during the past 6+ months for your company and/or your industry sector?

2. Key Learnings:
   What can you share by way of innovative solutions/best practices developed at your company to address the COVID-19 supply chain management challenges and opportunities?

3. Path Forward:
   What guidance do you have for us (Supply Chain and Operations Department at the University of Minnesota) going forward – e.g., related to curriculum design and delivery, career preparation of our students, and faculty research?

The discussion was moderated by K. K. Sinha, Chair of the Supply Chain and Operations Department. Below is the executive summary of the key takeaways from the discussion followed by the full transcript of the discussion.

EXECUTIVE SUMMARY OF THE KEY TAKEAWAYS FROM THE DISCUSSION

Large Retailer: Shifted entire customer facing distribution model to curbside only. Safety, both customer and employee became a major area of focus. Company strengthened its commitment to be obsessed with customers and employees. Way forward/recommendations: SCM professionals need to be prepared to deal with employee issues; safety, staffing, etc. in time of major risks and change.

Technology BTB Services provider: BTB relationships became unpredictable. Some customers have been lost/failed so far. Decision making has become much more short term. Way forward/recommendations: SCM must be more adaptable in environment of limited or no data. Need simulation and scenario planning skills.

Large consumer products manufacturer/retailer: Saw whipsaw demand/volatility. Shifted entire retail model to appointment based, no walk ins. Way forward/recommendations: SCM needs risk assessment/management and scenario planning skills beyond current capabilities.
**Medical Devices Manufacturer:** Unprecedented demand volatility and shifts in the market. Needed extremely creative ways to meet demand spikes. Company brought back older models and crowd sourced them to try and meet critical demands. Way forward/recommendations: Need to focus on end to end supply chain and better understand risks. Scenario planning.

**Medical Devices Manufacturer:** Supplier risk factors were discovered that were unprecedented. Example; geographic location became critical depending on the state of Covid 19 and pandemic restrictions in that area. Way forward/recommendations: Company used its supplier risk management tools (developed with U of M Capstone team) to manage supply risks. Be prepared and do forward looking risk assessment and scenario planning.

**Consumer Goods/Agribusiness company:** Food supply and security issues became apparent in unexpected areas. Main challenges were around people staffing, security, and safety. Also saw huge demand volatility and demand shifts. Supply chain disruption in ports and logistics areas. Way forward/recommendation: SCM needs to be better prepared to deal with people issues; security, safety, etc.

**Consumer Goods/Agribusiness company:** Company shortened decision making cycles, both management speed of making decisions and also shortened the time horizon for project evaluation (i.e. payback period). Way forward/recommendations: Supply chain design and planning must take into account potential disruption/risk factors to a greater degree than historically. In the past cost has been primary driver for supply chain design, must anticipate risk and disruption recovery cycles in evaluation of supply chain design and investments.

**Consumer Goods/Agribusiness company:** Added new suppliers to address demand volatility/shifts. Had to adapt plant operations to address personal safety/social distancing. Way forward/recommendations: SCM profession needs to be prepared to anticipate and manage staff issues in the area of personal safety.

**Global industrial goods manufacturer:** Saw unprecedented volatility, supply disruptions, and demand shifts. Company created a “war room” approach to look at global supply chain. Had to create new tools/metrics and business intelligence data processes to manage the health of the supply chain. Way forward/recommendation: SCM needs to understand how to manage in crisis mode; war room approach and data analytics.

**Global industrial goods manufacturer:** People safety and personal protective equipment were big issues for the company throughout the pandemic. Also communications processes with suppliers had to be redesigned. Historical approaches (impersonal, electronic) were not yielding enough information about the state of the supply base. Started communicating using phone calls, etc. to get better sense for suppliers’ capabilities and issues. Way forward/recommendations: SCM needs to scenario plan for crisis in supply chain design.
Global consumer goods manufacturer: Saw unprecedented demand/supply shifts. Disruption experienced in supply chain that was never anticipated. Way forward/recommendations: SCM needs to scenario plan for crises and have risk management plans to address. Supply chain design and supplier selection criteria may need to be changed to give greater weight to supplier risk factors such as those recently experienced during Covid 19.

FULL TRANSCRIPT OF THE DISCUSSION

COVID-19 Discussion - Retail

Sallie Burke, Vice President of Transformation Planning at Best Buy.
Sallie noted that Best Buy is a retailer and while they have dot com too, they have tons of stores. Before COVID they were focused primarily on their stores and with COVID they had to shut all of them down.

- She said we could still operate through fulfillment channels and were able to turn to a curbside model in 48 hours.
  - We weren’t allowing anyone into the stores, but we could still fulfill those orders from the inventory sitting in those stores through the parking lots.
  - We had already been doing this testing at a lot of locations, so it was there; we just hadn’t scaled it up yet. The teams were amazing in how they could scale it.
  - We had been working on how to be more flexible, more nimble, how to have different channels, whether it be through our distribution nodes, our delivery pads, our other fulfillment houses and our stores. This was a huge challenge and we were tested to the limit and we found out just how flexible we could be. Through a lot of hard work and effort we were able to do this.

- The other challenge and opportunity was around the safety of our employees.
  - Sometimes we don’t always recognize that or put our efforts there, but in times of crisis like these, that’s when we felt we really shined and we were able to put safety first, our employees first.
  - If we take care of our employees, if we take care of our people, they will pay us back tenfold in what they can deliver for us.

- As far as a path forward, we’re continuing with our employee obsession, to make sure that our employees are safe and our customers are safe.

- As far as the path going forward in terms of curriculum:
  - Sallie shared that when she was in the program that they learned a ton of great information on how we manage supply chain, how we manage all the boxes through, how we can be most innovative, move things more efficiently and there was a lot of leadership develop too, like Kevin’s class.
  - One thing that might have been missing is how do we take care of our people; how do encourage, motivate and inspire people.
    - People management, how do we take care of the teams.
    - And there are different levels of teams - remote versus face to face
    - Tactical things versus strategic things
How do we filter people management through the curriculum and into some of the courses.

Brianna Birkholz, Senior Director, Strategy Execution at SPS Commerce (at the intersection of retail and commerce) spoke next. SPS commerce is a software and full-service provider offering B2B solutions for retailers and their supplier communities. Brianna noted in B2B we’ve had a challenge in understanding predictability and where there are distressed customers and disrupted businesses and how can we meet or even anticipate the needs of those customers.

- As we have just heard, retailers are shifting business models to pick up in the store and to much more drop ship and direct to consumer business.
- We’ve seen a lot of customers go out of business, so we look to serve not only the retailer but the supplier community.
- We need to be a partner for distressed customers, trying to retain them and identifying ways where we can meet them where they are is very important.
- In terms of key learnings, being very responsive, making shorter term decisions that we pride ourselves on at SPS and being a very agile company.
  - The time horizon of decision making has really shrunk and we have tried to pull that in and be very conscious of that, whether it’s how we communicate to our customers, to our employees and even to our shareholders.
- Guidelines for the program, the department and the curriculum, Brianna suggested continuously thinking about adaptability, which can have a lot of applications.
  - There are courses available for problem solving, but how about throwing something at the student that tests their adaptability, especially when you consider limited data.
  - Teach that adaptability through things like simulation scenario planning, when you don’t always have data at your fingertips. That’s a key area where we have seen people rise to the challenge or not.

Tony Rossa, Vice President, Supply Chain Optimization, Sleep Number spoke next.

- We had a record first quarter and then a lot of our stores had to shut down we had to slam the brakes on our entire supply chain all the way upstream.
  - Then with the focus on everybody being at home the demand for our product has gone through the roof.
  - We went through going 100 miles an hour to 10 miles an hour to 120 miles an hour, so it has been a very interesting case study on how to manage that.
    - The challenges are in facing the volatility and the unpredictability of not knowing what this is going to look like going forward.
    - It has forced us to take a look at our model for our customers.
      - Once we were able to open up the stores it forced us to go to a very personalized model with our customers as opposed to looking for store traffic.
• We did a lot of reach outs and actually set up appointments, which created a unique experience for our customers, which has really been paying off for us and I don’t think that is something that we would have explored had we not been in this situation

• The other thing that really hit home for us was not only the intimacy with the customers in that situation, but also with our suppliers and having that really frequent communication when you don’t know what the future holds.
  • That really hammered home the intimacy we needed to have all up and down our supply chain with our carriers and our suppliers, so you can handle any kind of disruption.

• As far as feedback for the program, I think looking at risk management and scenario planning and what the value of that is.
  • When we have had previous instances of supplier disruptions, that really helped us manage this situation, in certain aspects, very well.
  • The more we can integrate that muscle into a supply chain professional, how to think of different scenarios and potential disruptions and making sure that the structure and the design and the facilities and the people are prepared for things that will happen.
  • You never know exactly what is going to happen, but you can learn to reinforce your supply chain for a lot of different scenarios to prepare for the unknown.

**COVID-19 Discussion - Medical Device - Health Sector**

Sheri Lewis, Vice President Global Operations, Minimal Invasive Therapies Group (MITG) at Medtronic, spoke first from this industry. Sheri shared, from their experience, what you can do in a pandemic if you align your resources appropriately.

• We make acute care vents at our Galway Ireland facility and as the pandemic continued, from the beginning, we saw a spike in the respiratory and airways type products inclusive of the badly needed ventilators around the globe
  • This is a great story about, looking at supply chain end to end and really understanding true capacity and especially with one particular vent, which was end of life.
  • We opened up an open sourcing activity on that particular vent, where we would share all the drawings and give it any company out there that wanted to participate.

• And then for some of the other ventilators that we produce, and continue to produce and that are heading into next generations versions, it was getting our raw materials, suppliers, test equipment, our distribution and logistics partners all lined up.
  • So, we had a complete end to end supply chain that was going from 150 units a week to over 1000 in a six-week time frame, so it was really cranking up that supply chain and having complete transparency and visibility
  • Then having three-time weekly meetings with our CEO to ensure that he really understood the amount of effort going into this, because at the time we had
many governments around the world calling to place orders and to give us heads up about tenders that would be coming from a global perspective.

- And we had to do this all while keeping our people safe as others have said.
- And ensuring that we had the right level of attention with our suppliers.
- I think it was a great case study of what you can do in a short amount of time even with second sourcing and qualifying additional suppliers, when you have a case that you know is serving people who are needing to get on ventilators.

- For the students, I think it is really thinking more about end to end supply chain not just thinking about what’s happening in manufacturing. When you go through a significant ramp like we have, ensuring that you have a known capacity truly end to end.

Jim Schuld, Value Stream Director at Medtronic, shared a similar ramp up story

- If you are implanted with a pacemaker you’re typically given a home monitor and one big challenge was a huge increase in home monitoring
  - We saw about a 40% ramp up within a few weeks when COVID was really starting to hit in March, so it was a big challenge and similar to what others have shared.
  - One nice part of that is that it allows people to be able to not go into the doctor’s office and be exposed and to not use PPE since they can send their data from home.

Kevin Spinti, Vice President, Global Procurement, Heraeus followed.
We faced a lot of the challenges that were faced by others, but my big lesson was from very early on when the pandemic was first starting and we were learning new things every day. We learned how important it was to have a good handle on where our suppliers were. We monitored what risks were we facing in terms of workforce disruptions as COVID swept through Europe and then came here and to other countries.

- To that end it was very helpful that we had our supplier risk management tool that was a Capstone project from 2019 that we had ready to go that the students put together; it gave us great access as to where the suppliers were.
  - We were able to update that within a couple of days and understand which suppliers we expected to be hit when from workforce disruptions. It helped us get in front of it as best we could in late February and early March.

Bill Goins, VP & GM, Healthcare Innovations, King Solutions spoke next.
He shared the steps involved in assembling a nonprofit called Global Wellness Consortium. and he noted that healthcare and the whole medical industry, is a corner stone of that. The question is how do we get in front, coming out of the pandemic, so this region can be ahead of other markets in the short and long term.

- We have already created an MOU in Brussels Belgium working with the Golden Triangle of Paris and Amsterdam and Frankfurt. They are huge in the med tech space, particularly pharma. So now we are bringing together three legs of the stool: public, private and academic.
• The Consortium has created a presentation and has presented it to 20 groups and individuals and just this afternoon they presented it Senior Vice President of Finance for the University, Myron Frans and he was blown away by it. These are the kind of things we can do as a market when we work together. It has a lot to do with supply chain and the health care industry and wellness, and it also includes nutrition, which means food.

COVID-19 Discussion- Agribusiness

Greg Mueller, Enterprise Supply Chain Leader, Cargill shared about their experience next. First and foremost, our main concern was about our people, food safety and food security.

• The discussion was about whether or not this was going to cause a major disruption in our food chain.
• Also, we were deemed a necessary business within most governments and we’ve got 1500 odd plant locations and only a handful of them ever had to shut down.
• We knew we had a significant challenge in terms of keeping our people safe and keeping our food safe.
• As we started to create systems and processes to deal with the next dramatic changes we saw were with some of our demand patterns. Where were people eating food. Not in restaurants or cafeterias, any more, or schools.
  O It was a dramatic shift from our food service to our retail and so retail started pulling really hard.
  O So that was a challenge to try and shift our supply chains, and some of our packaging and other things, and divert all that volume into the retail sector. And to this day a lot of that has not come back even with the opening, it’s starting to come back a little.
• And then the disruptions that were happening at ports and other third parties. Things were being shut down or the labor wasn’t there. People were sick in certain places.

Greg Good, Global IBP Program Lead, Animal Nutrition, added to the Cargill discussion.

To confirm, I had the same three points.

• We had to focus on safety. We had to focus on agility as we shifted from food service to retail and we focused globally on geography to geography as the pandemic spread across the globe.
• And we had to focus on the quality of our supply base, because some our customers, as their supply base failed, they came to us.
  O We had to rely on end to end perspective on the quality of our supply base to keep our supply chain running as smoothly as possible.
• As Greg said we had very few shutdowns, we certainly took some for safety reasons to make sure that we could run safely, but otherwise we had some plants just running full out once we got things balanced out to be able to serve our customers as best we could. Lots of learnings in those three areas.
Dustin Braun, Senior Director, Logistics, Land O’Lakes, gave their perspective. Dustin said that he thought Greg and Greg summarized it up very well from a food and ag perspective, being deemed an essential industry and having to keep going, keeping plants up and running through incredible uncertainty.

- It was definitely a challenge and I think the challenging thing for us was just the law.
- There wasn’t a national approach and COVID was hitting in different spots at different times.
- Taking some of those initial learnings from plants in the northeast where COVID was hitting first in the US and being able to apply those practices helped.
  - With Wisconsin being hit hard right now we are still using some of those initial best practices.

When I think about what this means for Supply Chain, we learned a couple of things. We were forced to make decisions faster than ever.

- And Brianna said it earlier, you don’t have all the data in front of you. You still have to make-a-decision.
- Cross functionally, where before you maybe would beat around the bush and maybe barter back and forth – there wasn’t time for any of that in Q2 and even to a certain extent today where we are with demand or supply.
  - The question is how can we keep up the speed of the decision making where it has been the last six months; disruptions are probably not going to slow down.
- The other thing I think about is supply chains over time have migrated to efficiency. Wall Street loves efficiency and it helps pay the bills.
- We are not built for resiliency. And that is the thing we are challenging ourselves with now is not just how can we take out cost, have the lowest cost operation, beat last year, all that stuff. It is more about what’s the next disruption and how are we going to meet it.
  - How can we plan for it? Is that a good investment in capital?
  - We have to think differently, going forward, and I think we would look for in students in the future coming out of the masters’ program or undergrad, that they would have that mindset of resiliency. I think that’s the thing, especially undergrads, can lean on. They are living it, right? They have to be resilient; they are not getting the same college experience that everyone else has gotten.

I think relating resiliency to supply chains is what I would ask of you all as professors.

Pat Murphy, Director, Supply Chain Leader, General Mills spoke next. Pat said that he could totally relate to what to what his colleagues in the food industry have shared. He also added that our game was changing from a game of share in competing for a finite universe of food to a game of availability, and we had to change the character of our supply chain. If you think of the Gaertner models from an efficient supply chain to an agile supply chain. In a couple of ways, we did that.

- Within our supply base if we think about North American both retail and food service we have about 200 points of supply, manufacturing supply.
• And we learned that we would go out and shop and bring on more suppliers, even though they were going to be higher cost and maybe they weren’t going to deliver the same product we had to market before.
  o I think we brought on about 40 different suppliers over the last six months and that is really helping us compete now in our busiest of season. A lot of our businesses have a natural spike in September, October, November, December. So that’s helping us now in our manufacturing world.
• We’ve got about 9000 North American employees in our manufacturing plants.
  o We diagnosed early that we had a risk, of maybe a 1000 positions, that could not appropriately socially distance and we got very detailed about how we would either mitigate that or redesign the work if necessary. As a result, we haven’t shut down any plants and our folks feel that they are much safer at work than outside of work, which is great.

We just got real about things that you guys teach that have been there, but we have never had to do.
• Things like business continuity plans, risk management, control towers. And we got very real about those and they worked. They worked fabulously and I am very proud of that.

At General Mills, early on we said it was going to be about keeping our people safe, about servicing our businesses and about feeding everyone and behaving according to our values. And I think we have done that and our business is strong and supply chain has been recognized as our key enabler. I think our stock and our status in the organization has risen to an all-time high.

COVID-19 Discussion – Global Manufacturing

Sean Wu, Global Vice President Supply Chain Management of the Hydraulics group at Eaton, spoke first in this category.
First of all, our business it is kind of cyclical. In 2020 we have been dealing with two cycles. The beginning of the year we were very low, in the bottom of the cycle and then came COVID and that was our first challenge and we were dealing with this disruption.
• We have the global footprint and the global supply chain base. With COVID, they lock down everything, China, India, Italy all over the place.
  o The learnings we can share with you from the global supply chain manufacturing environments is that we create a platform we call the war room. We have been running for at least three or four months. A war room to give a quick decision point or share the information.
    ▪ We have chapter leaders from each area and we meet each day and talk about supply chain issues and we also include those factories which are shut down in those countries.
    ▪ We have people with cross function and they meet together daily and prioritize which issue they are dealing with. Either we need a second source or we are going to move the supply chain or we need to inform the customer what we are dealing with.
We have factories in China and India and they are the feeders to my US plants so when they shut down I lost my supply chain.

- Because of the downturn with COVID it got even worse and our customers were being shut down so we lost the orders.
  - In the end we had to shutter our own factory in the US.
  - During those shut downs the question was how will we connect with our global factories to make them informed to arrange the proper planning and manage others. The war room is helping very much in this regard.

Talking about learning opportunities others have mentioned: the people

- The challenge is we are not able to meet with our teams in person. I am not able to visit my suppliers. I am not able to visit my factories. How can we get the teams engaged and motivated, especially in this very dynamic situation.
- For some of our employees it also demonstrates a very unique capability to navigate through this situation and help us fix the problem.
  - For example, we have a supply issue in one our factories. We can’t go to the factory so how do we manage that. We have virtual meetings; we put some tools in the factory, such as a video camera so we can see how they set up the machines and then my engineer can watch those.

Another learning we have that others have talked about is agility. As for my business, Eaton, how can I be more agile in these environments all the way from our customers to our supply chains.

- My business is very high variety and low volume so when we ramp up that is a huge challenge through the supply chain. There are so many parameters. We used to have data pool and we would try to pull the data from the system to analyze what is the demand for,
  - This year, 2020, as a company we invested a lot into Power BI, a business analytics service. Now we bring all this into a Power BI.
    - As a supplier I can click my computer and say, Wow what’s my order book for today. How are we going to fill for myself, by plants, by customer. What’s the ongoing. What’s the commitment.
    - I can quickly tell the leadership this month we are doing well. We will probably overdrive ourselves by 5 million dollars. Data is very critical. Data Science, Data analytics.

Steve Van Vossen, Vice President, Operations Center of Excellence, Tennant, spoke next.
Part of our thing, which people have mentioned, is making sure that our people were safe and that included not only the environment they’re working in, but trying to acquire some of the personal protection equipment that’s necessary for people going into the plants to continue production.
- We got very creative on how we went about doing that. Everything from hand sanitizer working with micro-breweries and things like that that were coming on line to provide
kind of unique solutions in those areas. So, creativity was something we were very focused on as we tried to solve some of these issues.

- Because this started from a global standpoint we saw the writing on the wall and we started really do a more aggressive communication plan with suppliers. Not communication by email, but by getting on the phone with our suppliers and talking with them on a more regular basis to really try to manage the risk of part availability going into our plans again.
- When you have a challenge of business dropping off a little bit, it’s very important to try to maintain revenue streams as much as possible. And we found that by having direct communication with our suppliers.
  - It was an exhaustive task from a global perspective that encompassed pretty much all hours of the day.
  - But it was extremely important for us and truthfully, knock on wood, very hard, we’ve had very minimal disruptions to our supply chain and I attribute that to a lot of the direct communication we had like talking with them on the phone, having direct conference calls, video calls, things like that.
- As was pointed out we were not able to go visit those suppliers so we had to do the best we can in the environment we are operating in.
  - And then we also started monitoring because of the size of the company we are and because of the size of the company many of our suppliers are.
  - With our suppliers there are many cases that direct communication was important, but we also started using other external areas to start monitoring and hopefully be proactive about where risk may be coming from and we started to segment our suppliers into high, medium and low risk, just to make sure we had a clear understanding and obviously focus our effort from a communication standpoint on those suppliers we thought were even higher risk.
- The other thing, going back to people, and I am going to overutilize the term communication, but really maintaining connections with our people.
  - We did surveys early on. People were not able to stop by and chat with someone as they had been when they were in the office so we focused on making sure we kept the health of connections with our people.
  - We did creative things like going to a park and meeting for lunch in a small group and having social distancing in those areas, just too make sure that we kept people energized and encouraged in an environment that obviously was very challenging.
  - I think communication was extremely key for us to manage the risk as well as understanding some of the risk side of things and using both our communication with our suppliers, as well as some external sources to make sure we were managing that accordingly.

Mike Dwyer, Senior Manager, Global Strategic Sourcing, Polaris, spoke last on this topic. There is just one thing I wanted to comment on around supply chain and that is supply chain design and supplier selection.
• We have really started to emphasize elements of supply chain design and selection that we have not emphasized in the past when we talk about agility localization, capability redundancy, capacity management.
• All these things that usually take a back seat to cost and lead time and some of your more traditional elements when designing your supply chain. We are seeing value of some of these elements like we’ve never seen before and we are transitioning our approach and perspective around supply chain design at Polaris.
“Diversity, Equity and Inclusion (DEI) in Supply Chain Management”

Panel Discussion at the Supply Chain and Operations Board of Advisors Meeting
December 10, 2020

Executive Summary and Key Takeaways

Panelists:
From Industry:
- Karin Lucas, SVP, Chief Customer Success Officer, SPS Commerce.
- David Edgerton, Jr., Founder and Managing Principal, DEJ Group
- John Stavig, Executive Director, Holmes Center for Entrepreneurship at the Carlson School.
- Nancy Ballou (Nichols) Director of Supplier Development, Metropolitan Economic Development Agency, MEDA.
- Chaiteny Razdan, Cofounder and CEO, Care+Wear - based in New York City.
- Camille Snyder, Process Lead of the Supplier Diversity Team, General Mills
- Chad Fifield, General Manager, Amazon Shakopee Fulfillment Center
- Mahammud Hirsi, Operations Manager, Amazon Shakopee Fulfillment Center

From the Carlson School of Management:
- David MacCallum, Associate Director, Carlson Consulting Enterprise
- Scott Martens, Professional Director, MS in Supply Chain Management MS SCM
- Anant A Mishra, Associate Professor, Supply Chain and Operations Department

Moderator:
- Kingshuk K. (KK) Sinha, Professor and Chair, Supply Chain and Operations Department

The panel discussion was framed around (but not restricted to) the following three questions:

1. **Challenges/Opportunities**
   What are the top “supplier base” and “supply chain management talent pool and leadership development” challenges and opportunities related to diversity, equity, & inclusion for your company and/or your industry sector?

2. **Key Learnings**
   What can you share by way of innovative solutions/best practices developed at your company to address diversity, equity & inclusion challenges and opportunities for both the “supplier base” and the “supply chain management talent pool and leadership development”?

3. **Path Forward**
   What guidance do you have for us (Supply Chain and Operations Department at the University of Minnesota) going forward – e.g., related to curriculum design and delivery, career preparation of our students, and faculty research that addresses the diversity, equity & inclusion challenges and opportunities for both the “supplier base” and the “supply chain management talent pool and leadership development”?
Executive Summary

1) Across all the discussions one theme stood out; organizations/companies must succeed in DEI initiatives or risk loss of economic value.
   a. Markets and customers are diversifying. Organizations that lag behind will lose out to those that are successful in DEI initiatives.
   b. Diversity in the supply chain is critical to success. A key point: diversity in supply should add economic value rather than be viewed as a cost to bear. The pandemic has further shown the importance of supply base diversity in achieving success in the market.
      i. Diversity vs. Cost or Service is a false comparison.
      ii. Diverse suppliers have proven to be as successful as all suppliers based on study of government contracts.
      iii. Find the ways and means to get diverse suppliers “a seat at the table” and they will bring value.

2) Lots of discussion about tactics and the means to achieve diversity plans:
   a. Awareness, training, and diversity focus from top to bottom of the organization.
   b. Increased engagement with diverse communities at all organizational levels. Particular importance in engagement with small/med businesses that can become the foundation for larger opportunities.
   c. Need to continue to diversify workforce/talent including:
      i. Broaden the base by ensuring requirements (hiring, recruiting) are truly necessary and not barriers.
      ii. Ongoing engagement with diverse populations and constituencies.
      iii. Target key diverse employees for development. Do this in a focused, deliberate way to ensure it happens.
      iv. Build and utilize affinity groups that support diverse populations. Amazon’s East African leadership group is a great example.

3) Key areas of opportunity for Carlson/SCM program:
   a. Be focused and intentional about bringing diversity initiatives into the classroom.
   b. Continue to develop means for engagement with diverse communities. CCE/project engagement has been a good start.
   c. Ensure that we continue to diversify the student base.
   d. Some specific recommendations or actions:
      i. Use the SCM BOA as a platform going forward to share successes.
      ii. Incorporate DEI into the case competition. (Dave E. on the panel volunteered to help)
      iii. Incorporate DEI discussions and companies in class work and curriculum. (Sourcing course as an example.)
      iv. Utilize Carlson as a hub for development and engagement with local diverse businesses.
Key Takeaways from the Panelists

Karin Lucas (SPS Commerce)
1) Added “Reducing Systemic Racism” as a corporate strategic initiative.
2) Took key actions at SPS Commerce:
   a. Focus on key populations:
      i. Created a focus on Black populations
      ii. Created a focus on the US history in this area
      iii. Created a focus on Minneapolis
   b. Get educated
      i. Training for senior leaders including the history of Minneapolis housing
         (“Jim Crow of the North” documentary film).
      ii. Develop common vocabulary
      iii. Cascade down through the organization
      iv. Get personal commitment from leaders.
3) Identified 3 Pillars for DEI plans:
   a. Expand the talent pool. Review job/hiring requirements to broaden the pool.
   b. Employee education and engagement.
   c. Community support.
      i. Accelerate Supplier diversity
      ii. Enhance Black owned business focus

David Edgerton (DEJ Group)
1) Focus has been on Small/Med business and developing a “street MBA” for small/med business leaders.
2) Very important to focus on Cradle to Community development and identify barriers.
3) Need representation in all functions of the organizations, not just customer facing.
4) Companies who are trying to develop their communities need to:
   a. Provide Resources
   b. Develop the talent base within these communities

John Stavig (Holmes Center for Entrepreneurship)
1) John and his group working with MEDA. Mentioned the “Minnesota Cup” as an example of a tool to grow small/med business skills.
2) Mentioned the three M model: Management, Markets, and Money. These are themes in their training/engagement activities.
3) They have been successfully focused on service companies in the entrepreneurship development.
4) Connecting to companies through MEDA. Stressed the importance of modifying contract terms to level the playing field. Also need to know where spend is that can be targeted.
Nancy Nichols (Metropolitan Economic Development Agency)
1) Procurement contract complexity is a barrier. Focus on simplification to enhance access to small/medium diverse companies.
2) They are focusing on “anchor” companies which are the larger corporate organizations in the Twin Cities.
3) Highlighted that studies have shown the once BIPOC entrepreneurs can grow beyond $10M revenue there is an acceleration effect on diversity in customers, employees, etc.
4) Ascend is in 13 other cities so there is a network available for collaboration across large U.S. markets.

Camille Snyder (General Mills)
2) Supplier Diversity is a key element in achieving equal representation.
   a. Unconscious bias is the top challenge in working supplier diversity.
   b. Buyers see diversity as a trade-off vs. cost and service. This is a false comparison.
3) The key challenge is how to create sustainable growth in diversity?
4) Guidance to the U of M:
   a. Include Supply Base Diversity as part of the curriculum.
   b. Grow the diversity of the student base.

Chait Razden (Care + Wear)
1) They are a small & growing company. Very diverse now but thinking about how to continue growth while maintaining diversity in its organization.
2) Company focuses on design beyond just function.
   a. Thinks a lot about end user diversity.
   b. Thinks a lot about supplier diversity. Many products were originally sourced in Asia. Now developing “local” suppliers/manufacturers closer to the customer base.
3) They deliberately have focused on making advertising more representative of actual users vs. using models.
4) Key focus at the company is maintaining an “open door” policy. Must maintain open dialogue with the staff at all levels and ensure that this continues throughout the growth.

Chad Fifield (Amazon – Shakopee Fulfillment Center)
1) Massive growth at Amazon creating challenges in maintaining a diverse workforce.
2) Traditional hiring cannot yield the diverse pool of talent needed.
3) Key focus is tapping into existing employee base and organically develop diverse leaders.
   a. Intentionally identify and develop the right people to achieve diversity at higher levels.
   b. Need to lean in and use employee affinity groups as a means to develop leaders.
c. Mahammud Hirsi (following speaker) was an initiator and leader of an employee group and that has contributed to his growth in leadership.

**Mahammud Hirsi (Amazon – Shakopee Fulfillment Center)**

1) Helped found and create “Bridge Builders”, an employee group focused on East African managers at Amazon.
   a. Wanted to create a “safe space” for engagement.
   b. Use as a vehicle to develop themselves and “own it”.
2) There are 30 managers and 60 shift leaders from East Africa engaged

The formally scheduled part of the board meeting ended at 5:00 PM with thanks from KK. Quite a large group of attendees stayed on the call as KK opened up the meeting for follow up comments and/or questions which are summarized below:

**David Edgerton (DEJ):** This is a big problem. We’re losing competitiveness due to lack of diversity. It’s much, much harder to diversity an organization from top to bottom vs. just at lower levels. Pandemic has increased the importance of supply chains and the need for inclusive supply chains.

**Mahammud Hirsi (Amazon):** Discussed “Ubunto”, an African term that roughly means that your value is based on how you develop the people around you. Asked a question for Carlson: “How intentional are you in mentoring and developing the underserved students and groups beyond just the classwork & academics?”

   KK responded that current institutional initiatives are in place in this area. But, there is more to be done to facilitate growth of the BIPOC business community. Carlson’s unique location should be an advantage that we need to exploit. KK appealed to the SCM BOA to support and assist by becoming a resource of mentor as Carlson works on this.

**Nancy Nichols (MEDA):** Emphasized that DEI actions are a necessity for companies to by positioned competitively as markets become more diverse. No longer should there be a “set aside mentality” as this is becoming an economic value imperative.

**Eric Wold (Stratasys)** asked a question. “As companies are transitioning to a more diverse supply base have these initiatives been successful when driven organically from within? Or, does it take outside resources to get traction?

   Nancy and Dave E. both responded that they are working with a lot companies through MEDA and other resources. “Companies that invest in these diverse communities create better opportunities to attract talent and customers”.

**Camille Snyder (General Mills)** commented that her company does not set aside spend for diversity supplier development. They focus on supplier development to get suppliers to the table.

**Marc Schopp (Entrust Datacard):** Commented that the BOA is a great resource for tools and ideas in this area and will be reaching out to get help. Specifically, he asked Camille Snyder to speak with his organization about supplier diversity.

**John Stavig (Holmes Center of Entrepreneurship):** The current student engagement CCE and MEDA is of great value. Use this as a template and build on this.

**KK** concluded the meeting thanking everyone and suggested, as an action item, that we should make every effort to add DEI as a topic for the undergraduate supply chain case competition.
Supply Chain and Operations Board of Advisors Meeting:
"Diversity, Equity & Inclusion (DEI) in Supply Chain Management"

December 10, 2020
1. Challenges/Opportunities
   - What are the top “supplier base” and “supply chain management talent pool and leadership development” challenges and opportunities related to DEI for your company and/or your industry sector?

2. Key Learnings
   - What can you share by way of innovative solutions/best practices developed at your company to address the DEI challenges and opportunities for both the “supplier base” and “supply chain management talent pool and leadership development”?

3. Path Forward
   - What guidance do you have for us (Supply Chain and Operations Department at the University of Minnesota) going forward – e.g., related to curriculum design and delivery, career preparation of our students, and research that addresses the DEI challenges and opportunities for both the “supplier base” and “supply chain management talent pool and leadership development”? 
AGENDA

1. External Panelists’ Perspectives (40 minutes)
   • Karin Lucas (SPS Commerce)
   • David Edgerton (The DEJ Group)
   • Nancy Ballou (MEDA) and John Stavig (Holmes Center for Entrepreneurship)
   • Chaitenya Razdan (Care + Wear)
   • Camille Snyder (General Mills)
   • Chad Fifield and Mahammud Hirsi (Amazon)

2. Carlson School Updates (20 minutes)
   • Dave MacCallum and Siddharth Chandramouli (Carlson Consulting Enterprise)
   • Scott Martens (MS in Supply Chain Management)
   • Anant Mishra (Supply Chain and Operations Department – Research)

3. Open Discussion – Reflections for Actions Beyond Today

Diversity, Equity & Inclusion in Supply Chain Management
1. One theme that stood out: Organizations/companies must succeed in DEI initiatives or risk loss of economic value.

a. Markets and customers are diversifying. Organizations that lag behind will lose out to those that are successful in DEI initiatives.

b. Diversity in the supply chain is critical to success. A key point: diversity in supply should add economic value rather than be viewed as a cost to bear. The pandemic has further shown the importance of supply base diversity in achieving success in the market.

i. Diversity vs. Cost or Service is a false comparison.

ii. Diverse suppliers have proven to be as successful as all suppliers based on study of government contracts.

iii. Find the ways and means to get diverse suppliers “a seat at the table” and they will bring value.
2. Tactics and the means to achieve diversity plans:

a. Awareness, training, and diversity focus from top to bottom of the organization.

b. Increased engagement with diverse communities at all organizational levels. Particular importance in engagement with small/med businesses that can become the foundation for larger opportunities.

c. Need to continue to diversify workforce/talent including:

   i. Broaden the base by ensuring requirements (hiring, recruiting) are truly necessary and not barriers.

   ii. Ongoing engagement with diverse populations and constituencies.

   iii. Target key diverse employees for development. Do this in a focused, deliberate way to ensure it happens.

   iv. Build and utilize affinity groups that support diverse populations. Amazon’s East African leadership group is a great example.
3. Key areas of opportunity for Carlson/SCM program:
   a. Be focused and intentional about bringing diversity initiatives into the classroom.
   b. Continue to develop means for engagement with diverse communities. CCE/project engagement has been a good start.
   c. Ensure that we continue to diversify the student base.
   d. Some specific recommendations or actions:
      i. Use the SCM BOA as a platform going forward to share successes.
      ii. Incorporate DEI into the case competition.
      iii. Incorporate DEI discussions and companies in class work and curriculum. (Sourcing course as an example.)
      iv. Utilize Carlson as a hub for development and engagement with local diverse businesses.
Email Correspondence

Date:   Sept. 28, 2021
To:     Jeffrey Ettinger
From:   Liz Rammer

Re: Hospitality Industry Info for Council Consideration

Dear Jeff,

Please find MN hospitality industry information below and attached for you to share with the Governor’s Council on Economic Expansion. If you have any questions or need anything further at this time, please let me know.

Thanks,

Liz

Hospitality businesses are in need of help. Many hospitality businesses continue to be in significant need of targeted financial assistance based on need to hasten the pace and depth of economic recovery. Please see the attached letter to Governor Walz/legislative leaders and Economic Snapshot that includes the following top concerns:

- 56% of foodservice businesses and 44% of hotels remain in jeopardy of bankruptcy;
- 62% of foodservice businesses took on debt over the past 18 months due to COVID with a projected average loan value of $540,000 for a total of $3.3B statewide in debt;
- 66% of hotels took on debt over the past 18 months due to COVID with a projected average loan value of $1.15M for a total of $755M statewide in hotel debt; and
- 81% of hospitality operators describe labor availability as “tight.”

American Rescue Plan Funds were Designed to Help Hospitality. It’s critical to keep at the forefront that American Rescue Plan (ARP) dollars are specifically intended to provide relief to hospitality as one of the uses of section 9901 funds:

“(1) USE OF FUNDS ... A) to respond to the public health emergency with respect to the Coronavirus Disease 2019 (COVID–19) or its negative economic impacts, including assistance to households, small businesses, and nonprofits, or aid to impacted industries such as tourism, travel, and hospitality...”
Our letter to Governor Walz/legislative leaders outlines Hospitality Minnesota’s recommendations for the supplemental budget and use of dollars from the American Rescue Plan Fund (ARP). For reference, we offer the following excellent examples in the Midwest of relief programs using ARP funds.

**Regional Examples of ARP Assistance to Hospitality.**

These outlays represent funds used from round 1 of ARP and may well be supplemented going forward:

- **Wisconsin** has already directed $420M in relief to small businesses (six times that in the MN budget agreement). This includes $140M targeted for tourism and entertainment (see article). $75M was targeted specifically to hotels (to date MN has not created any program for hotels/motels and they have been left out of other state relief programs due to their terms). Grants ranged from $10,000 to $2M. WI ARP funds also were targeted to other hospitality businesses including: $12M for live event businesses; $10M for live venues; $11.25M for movie theaters; $15M for destination marketing organizations; $10M for local tourism investment projects; and a $7.5M increase for tourism marketing. In December 2020 prior to ARP, Wisconsin directed $80M in CARES Act dollars to lodging, restaurants and music venues (See article). The lodging portion of that ($18M) was distributed to 600+ hotels with the average funding at $350/room. Sidenote: Washington D.C. ran a very successful program w/ its CARES Act dollars last year for hotels that was also right-sized using a per-room/per-key structure (this is on top of the Bridge Fund relief they did earlier in the pandemic that included grants to hotels at $144/room). **Nebraska also directed $30M of CARES Act to hotels** and convention centers (among other hospitality relief).

- **Illinois** is already directing at least $250M to small business relief from ARP round 1, including $25M targeted specifically to hotels; $25M to restaurants that didn’t receive federal Restaurant Revitalization Funds (RRF); $30M to arts and entertainment left behind by federal Shuttered Operators Venue Grants (SVOG); $100M to businesses in Disproportionately Impacted Areas.

**Hospitality Industry Employment**

In normal times the hospitality industry employs one in ten Minnesotans and is a key economic driver for communities across the state. The most recent data from the Department of Employment and Economic Development (DEED) found the industry is still down 30,000 jobs from pre-pandemic levels. As expressed in the attached letter, the State could assist in workforce recovery by: 1) incentivizing school districts to hire more ProStart and Hospitality Tourism Management Program teachers, 2) expanding the Department of Labor’s Youth Skills and Dual Training Pipeline Programs to include hospitality, and 3) investing in a Hospitality Training Program Modeled on South Dakota’s online hospitality training program along with the South Dakota Great Place Great Face marketing programs. (Please see attached letter for more details).

If we can provide more information or you would find it helpful for Hospitality Minnesota to address the Council, please let me know.

Thank you for your consideration.

Best regards,

Liz Rammer
September 9, 2021

The Honorable Tim Walz, Governor
State of Minnesota
130 State Capitol
75 Dr. Reverend Martin Luther King Jr. Blvd.
Saint Paul, MN 55155

Dear Governor Walz:

In the ongoing economic recovery, certain sectors of the hospitality industry remain extremely vulnerable. The challenges around COVID-related debt, workforce shortages, inflation, and concerns about Delta continue to put pressure on already tenuous financial conditions.

Our analysis of the most recent survey conducted by the Minneapolis Federal Reserve Bank, Explore Minnesota Tourism and Hospitality Minnesota related to the economic recovery is attached. In light of what we are seeing, we offer the following financial and workforce suggestions to aid recovery as you consider your supplemental budget and spending of American Rescue Plan funds.

Perhaps the most troubling finding from the survey is that 56% of foodservice operators and 44% of hotels remain in jeopardy of financial collapse in the next 6-12 months, despite some indicators of strong revenue performance over the summer. This is particularly concerning since 69% of hotels and 45% of foodservice operators do not expect business conditions to return to “normal” until the second half of 2022 at the earliest.

Furthermore, while many operators in these two sectors saw strong financials over the summer, their projections for fall revenue are much more tepid. Earlier this month, the National Restaurant Association noted that 6 in 10 Americans are changing their dining patterns going into the fall due to concerns with Delta (with 19% saying they are no longer eating out at all). The American Hotel and Lodging Association recently reported that 67% of business travelers are changing their travel plans due to Delta. Weaker revenue expectations for fall, combined with challenges around COVID-related debt, workforce shortage and inflation are looming as potential anchors on economic recovery:

**COVID-RELATED DEBT.** Many foodservice and other hospitality operators lost the equivalent of 249 days of revenue during the government shutdowns and limitations on service and travel. These and other COVID conditions led to a projected $10 billion in lost revenue for this industry. At the same time, these small businesses’ bills for rent, mortgage, taxes, utilities, insurance, etc. continued unabated. For the first time, the joint economic survey inquired about COVID-related debt, and the results are startling:
62% of foodservice businesses took on debt over the past 18 months due to COVID with a projected average loan value of $540,000 for a total of $3.3B statewide in debt; and
66% of hotels took on debt over the past 18 months due to COVID with a projected average loan of $1.15M for a total of $755M statewide in hotel debt.

Unfortunately, there has been no targeted federal or state program to provide grant relief to hotels, and the federal Restaurant Revitalization Fund (RRF), though well-intentioned, has left over 2,500 Minnesota restaurants behind because the program was massively underfunded. Such significant debt obligations represent money that could otherwise be used to increase wages and benefits in a hyper-competitive labor market, deal with supply chain and inflationary challenges, or make necessary repairs/purchases.

**INFLATION PRESSURES.** Wholesale price inflation is posing additional challenges. 39% of hospitality operators indicate that wholesale prices increased more than 5% over the past year (outpacing the Consumer Price Index), yet only 19% of operators indicate they are passing on increases to consumers over 5%. This signals that operators are concerned about what the market will bear, with an eye toward a potential pricing “tipping point” that might suppress purchasing volume (e.g. while some consumers might pay $25 for a hamburger, this level of cost will price out many potential purchasers to an untenable point).

**WORKFORCE SHORTAGE.** According to the most recent data from the Department of Employment and Economic Development (DEED), the hospitality industry remains down over 30,000 jobs from pre-pandemic levels. While DEED’s projection that 100,000 plus workers may return to the workforce over the next month could help, there is broad concern that thousands of workers left the industry entirely over the past 18 months due to the volatility of the shutdowns and other COVID conditions. 81% of operators indicate that labor availability is “tight,” with 63% saying “very tight” the highest levels we’ve seen. Indeed, observation, anecdotal information and media reports tell the story of reduced hours, constricted capacity, limits on menu offerings and levels of service due to staffing shortages, adding further financial strain to businesses. Given that hospitality represents one-in-ten jobs in MN, and its importance as an economic driver for other commerce, we think it’s in all of our interests to work together to address this challenge, and we make several suggestions below.

**SUPPLEMENTAL BUDGET AND AMERICAN RESCUE PLAN FUND RECOMMENDATIONS.** Given last spring’s announcement projecting a $3.3B state budget surplus and $1.15B in additional American Rescue Plan (ARP) funding forthcoming, there is ample cause and resources for Minnesota to invest in the recovery of its hospitality sector. To date, our state has only spent 2.5% of its American Rescue Plan funds on small business grant relief -- $70M, compared to the $420M Wisconsin dedicated, representing 13% of its funds. We suggest consideration of several direct financial grant relief, tax relief and policy shifts.

**FINANCIAL RELIEF**

- **Grant Relief to Hotels/Motels.** While other states in the region like Wisconsin and Nebraska have directed grant relief to hotels/motels, Minnesota has not, nor has there been targeted federal relief. We suggest consideration of a per-key/per-room grant program for hotels/motels that operated at a loss, similar to that executed by Washington D.C. last year.
- **Grant Relief to Foodservice Businesses.** As noted above, many restaurants, event operators and catering companies have been left behind by the federal RRF. We suggest you propose a grant relief program for those 2,500 restaurants left behind by this underfunded program,
with payback provisions in the event RRF is ever fully funded, as well as relief for those that operated at a loss in 2021. For reference, the estimated need for those left behind by RRF in Minnesota was $700M.

- Property Tax Relief. As we suggested last legislative session, a 2-year property tax freeze would also act as economic stimulus for this industry. Legislation introduced and heard in both bodies to freeze the state levy portion was estimated to cost $30M per year.

- Sales Tax Exemption on Restaurant Equipment. Restaurants repair and replace their equipment frequently, yet unlike other manufacturing equipment, they must pay sales tax on the purchase, and remit the tax on the food product they sell. Legislation introduced and heard in both bodies last session would have exempted restaurants from this tax at an estimated cost of $8M per year.

- Alcohol To-Go. We ask that you champion making alcohol to-go permanent in the coming legislative session as so many other states have done. During the months MN allowed wine/beer to-go with food, liquor stores still saw record profits in MN because they are not direct competitors. Wisconsin made alcohol to-go permanent last year, and its wholesalers, liquor stores and other players in the market have continued to thrive. This is smart policy that is popular with the public and could help drive revenue in lean times and help repay debt.

As we have suggested previously, while the budget negotiations did not yield the necessary robust financial relief to this beleaguered industry, your administration does have an additional opportunity to immediately provide some level of grant relief to businesses via the $500M in discretionary funds awarded to you at the close of session. While we are aware that some of this funding has been allocated, we implore your team to consider this opportunity to provide direct relief to needy operators.

### INVESTMENT IN WORKFORCE

Addressing the workforce shortage and training needs in the short, medium and long-term in Minnesota’s hospitality industry will take creative thinking and teamwork. Minnesota’s ProStart and Hospitality Tourism and Management Programs (HTMP) are in 100 high schools and helping to train the workforce of the future. We are thankful that the legislature passed, and you signed legislation enabling $250,000 in grants to help schools pay for materials and training to maintain and expand these programs in lean times. In addition to this action, here are several other creative ways the State might help to solve this problem:

- **Incentivize School Districts to Hire more ProStart and HTMP Teachers.** While student demand for these programs is at an all-time high, resources for teachers is a challenge. Roosevelt High School, the pilot program for Minneapolis, went from 20 enrolled students to 80 this fall in just two years since inception, representing a four-fold increase. The lead educator there indicates they could easily have 320 students enrolled if they could bring in another teacher. The State should consider funding incentives to districts for expanding these programs. Alternatively, the State could consider increasing the reimbursement rate to districts for career technical programs such as ProStart/HTMP.

- **Expand the Department of Labor’s Youth Skills and Dual Training Pipeline Programs to Include Hospitality.** This successful program includes other high-demand fields. Hospitality is one of the fastest paths to management and entrepreneurship, with 9 in 10 managers getting their start at entry level positions and 8 in 10 owners. Additionally, those who get their start in hospitality, tourism and travel make more money over the course of their careers, even if they move to other industries, according to U.S. Department of Labor and
U.S. Travel Association. Based on our conversations with Mr. Wessels at DLI, additional funding would be needed for this expansion. We believe it would be a beneficial investment.

- Invest in a Hospitality Training Program Modeled on South Dakota’s Program. South Dakota has developed an online hospitality training program along with the South Dakota Great Places Great Faces marketing programs. These are essential and well-done certification programs for employee and business development working in partnership between the state and industry. We would be delighted to partner with the State to develop such programs to the benefit of Minnesota hospitality, and the businesses that bring it to life.

Minnesota’s hospitality industry stands at a critical juncture in the multi-year economic recovery and the state has a significant opportunity to help guide the way. We stand ready to meet with you and your team at any time to help in any way we can.

Thank you for your consideration.

Sincerely,

Liz Rammer
President & CEO

cc:

Senate Majority Leader Jeremy Miller, House Speaker Melissa Hortman, Senate Minority Leader Susan Kent, House Minority Leader Kurt Daudt, Senator Tom Bakk, Senate Finance Chair Julie Rosen, House Ways & Means Chair Rena Moran, Senate Jobs Chair Eric Pratt, House Workforce Chair Mohamud Noor, Senate Commerce Chair Gary Dahms, House Commerce Chair Zack Stephenson, Senate Tax Chair Carla Nelson, House Tax Chair Paul Marquart, Commissioner Steve Grove, Interim Director Leann Kispert, Commissioner Roslyn Robertson, Commissioner Heather Mueller, Commissioner Grace Arnold and Commissioner Jim Schowalter.

See attachment below.
HOSPITALITY ECONOMIC RECOVERY MOVING FORWARD IN MINNESOTA

Workforce, Debt and Inflation Pose Challenges to Pace of Recovery along with Delta

Economic conditions for Minnesota’s hospitality industry are improving, according to the joint survey conducted by Hospitality Minnesota, the Minneapolis Federal Reserve Bank and Explore Minnesota Tourism between August 16-25, 2021. However, workforce challenges, inflation, COVID-related debt, and uneven conditions across sectors pose concerns for the pace and depth of recovery for our interdependent industry.

Highlights and Key Takeaways

- 74% of hospitality operators indicate their financial health is now positive or growing (up from 50% in March, before our work on the Roadmap to Recovery led to full re-opening).
- Resort & Campground sector rebound has been extraordinarily strong:
  - 96% say financial health is positive or growing and 82% say solvency is not a concern;
  - 85% indicate 2021 summer revenues were higher than pre-pandemic rates; and
  - 59% expect higher fall/shoulder season revenue than pre-pandemic numbers.
- Hotels report positive financial health at double the March rate; project the longest recovery:
  - 60% report financial health as growing/positive (double the March rate);
  - 68% don’t expect “normal” business conditions till the 2nd half of 2022 or later; and
  - 37% saw stronger summer revenues than pre-pandemic conditions, though only 22% expect that trend to continue this fall.
- Foodservice operators report growing financial health, but major solvency concerns remain:
  - 74% report growing/positive financial health (up from 42% in March);
  - 56% are still threatened by bankruptcy in 6-12 months, relatively unchanged from May;
  - 42% saw higher summer revenues than pre-pandemic conditions, as 46% saw lower revenue; and
  - 46% expect lower than normal revenues this fall, with 29% predicting higher revenue.
Debt due to COVID-19 conditions is a significant issue facing foodservice and hotel operators:

- 62% of foodservice businesses took on debt over the past 18 months due to COVID with a projected average loan value of $540,000 for a total of $3.3B statewide in restaurant debt; and
- 66% of hotels took on debt over the past 18 months due to COVID with a projected average loan of $1.15M for a total of $755M statewide in hotel debt.

Industrywide, labor availability has not improved since May, with 81% of hospitality operators overall describing labor availability as “tight,” even more so for 96% of hotels and 91% of foodservice respondents.

Inflation is also an industrywide challenge with 39% of all hospitality operators indicating wholesale prices increased more than 5% last year, with only 19% indicating they raised customer prices at that same rate.

Read on to look at the following more closely:
- Workforce Shortage Industrywide
- Significant Debt Load on Hotels and Foodservice Businesses
- Inflation: Wholesale Increases Outpacing Consumer Pricing
- Delta Concerns Impacting Weaker Fall Projections?
- Future Economic Projections: Financial Health, Solvency and Return to Normal

**Workforce Shortage Industrywide**

While 75% of hospitality operators indicate they are currently hiring, workforce shortage continues to be one of the biggest challenges facing the industry. 81% of operators report labor availability as “tight,” with 63% indicating it is “very tight”. Unfortunately, the situation has not improved over the summer.

**MAY 2021**

- 65% Very tight
- 13% Moderately tight
- 6% Slightly tight
- 7% Not tight, good labor availability
- 10% Not hiring, and don’t expect to in the...

**AUGUST 2021**

- 63% Very tight
- 10% Moderately tight
- 8% Slightly tight
- 8% Not tight, good labor availability
- 11% Not hiring, and don’t expect to in the...

The hiring challenge is most acute for hotel and foodservice operators:
While Minnesota's hospitality and leisure industry added 7,700 jobs in July (more than half the 15,000 jobs added statewide during this period), our industry is still down nearly 40,000 employees from pre-pandemic numbers with 237,200 workers currently, compared to 276,700 in February of 2020 (a 14% reduction). For comparison, nationally, hospitality jobs are down 10% since Feb. 2020, and Wisconsin has seen a 16% reduction in workforce.

The industry may see some workers returning to the industry this fall as employees finish other seasonal work and more workers return to the workforce as enhanced unemployment benefits come to an end this week. During the Hospitality Roundtable call last week, Commissioner Grove projected that weekly benefits requests would drop to 85,000 from the current rate of 204,000 by October (the normal volume is 25,000). The volume of returning workers is unlikely to offset the number of workers who left the industry during the 2 extended shutdowns in 2020 or rectify the projected shortfall that existed prior to the pandemic. Industry experts indicated our state needed to add 20-25,000 jobs before the pandemic.

(Sources: DEED and U.S. BLS)

Having secured a $250,000 grant to expand the ProStart and Hospitality Tourism Management Programs (HTMP) in Minnesota high schools, we intend to sustain, expand and grow these critical workforce development efforts in high schools across Minnesota. ProStart is currently in 83 high schools and HTMP is in 17. Note: If you or anyone in your organization is interested in mentoring and or assisting teachers and students in your area and helping grow the workforce of the future, please contact cyndi@hospitalitymn.com

 Debt Load on Hotels and Foodservice Businesses due to COVID Significant
Hospitality Minnesota advocated with the Federal Reserve Bank of Minneapolis and Explore Minnesota to include a question on debt. For the first time, the survey included the question “How much, if any, additional debt has your business taken on over the past 18 months due to COVID?” When factoring in both full and partial closures and limitations, some hospitality businesses lost a projected 249 days of revenue over this period, yet bills for rent, mortgage, utilities, insurance, taxes and vendors continued unabated. Because of this, we were interested to know the extent to which debt load may prove a significant obstacle to the pace and depth of recovery.
- **66% of hotels took on debt** over the past 18 months due to COVID with a projected average loan of $1.15M or $755M statewide in hotel debt
- **62% of foodservice businesses took on debt** over the past 18 months due to COVID with a projected average loan value of $540,000 or $3.3B statewide in restaurant debt

**Federal Relief.** To date, there hasn’t been a targeted federal or state grant relief program for overnight accommodation operators, as there has been for restaurants. And, while a good program, the Restaurant Revitalization Fund (RRF), has left behind 2,500 MN applicants, seeking ($700M in projected relief, because Congress vastly underfunded it. We continue to work with our partners the American Hotel & Lodging Association and the National Restaurant Association to:

- Fully fund the RRF, so that all applicants get the help they deserve; and
- Expand the Caps and Flexibility on the Emergency Injury Disaster Loan program (terms for this loan program are 3.75% over 30-years)

**You can help!** Contact your congresspersons to demand they bring RRF up for a vote this month and push U.S. SBA to expand EIDL.

**State Relief.** At the state level, the application process for Minnesota’s $70M small business grant program begins later this month. While the program is smaller than what we advocated for and funds are limited, we encourage members to apply as soon as it opens. Learn more.

We continue to advocate for Governor Walz and the Legislature to direct American Rescue Plan funds for hospitality relief, including the $500M in discretionary funding Walz was given discretion over in the budget and the $1B in additional ARP funding coming in the new year. Minnesota Management and Budget is now accepting public comments on how the state should use ARP money going forward. Look for information in the coming week about how to weigh in.
**Inflation: Wholesale Increases Outpacing Consumer Pricing**

Inflation is also exerting financial pressure on operators as 39% indicate that wholesale prices have risen by more than 5% this year. While nationally the CPI (Consumer Price Index) rose 5.4% in the last year, only 19% of hospitality respondents indicated they raised consumer prices 5% or more. Across the 3 sectors, the gap between 5%+ wholesale increases and 5%+ consumer prices increases was:

- Foodservice: 56% to 32%
- Hotel: 36% to 24%
- Resort/Campground: 40% to 12%

**Delta Concerns Impacting Weaker Fall Projections?**

Nationally, concerns about the Delta variant are impacting consumer behavior. This week, the American Hotel and Lodging Association put out a report that 67% of business travelers indicate Delta concerns are changing their travel plans. The National Restaurant Association indicates that 6 in 10 Americans have changed dining habits due to concerns about Delta, with 19% no longer planning to eat out at all.

Here in Minnesota, there is a significant gap between the percentage of operators who realized stronger summer revenue (compared to pre-pandemic rates) and expectations for the fall:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent of Operators w/ Higher Summer Revenues than 2019</th>
<th>Percent of Operators Expecting Higher Fall Revenues than 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Hospitality</td>
<td>45%</td>
<td>33%</td>
</tr>
<tr>
<td>Food Service</td>
<td>42%</td>
<td>29%</td>
</tr>
<tr>
<td>Hotels</td>
<td>27%</td>
<td>22%</td>
</tr>
<tr>
<td>Resorts/Campgrounds</td>
<td>85%</td>
<td>53%</td>
</tr>
</tbody>
</table>

While some of these gaps can be explained by normal seasonal shifts in customer traffic, there is no doubt that uncertainty around the virus is top-of-mind. MN has not seen the same level of transmission as other areas of the country, yet the gradual increase here remains concerning. Mayo’s tracker indicates MN’s case rate rose to 29 cases/100,000 in August. Earlier predictions by the Mayo that MN’s rate would reach 37 by the end of August thankfully did not materialize. Their model is now predicting MN will hit the higher rate next week, though it also contemplates the potential for a best-case scenario that the rate will level off and decline by mid-September (and a worse case scenario that the rate could jump to 68 over the same period). The situation remains very fluid.
**Future Economic Projections: Financial Health, Solvency, and Return to Normal**

As with the uneven impact of the pandemic and initial phases of recovery, the survey indicates mixed results when it comes to the medium-term and long-term economic recovery trends.

The good news is that across all three sectors, financial health projections have improved significantly from March:

**MARCH 2021 (ALL HOSPITALITY)**

**AUGUST 2021 (ALL HOSPITALITY)**

**MARCH 2021 (HOTELS)**

**AUGUST 2021 (HOTELS)**

**MARCH 2021 (RESORT/CAMPGROUND)**

**AUGUST 2021 (RESORT/CAMPGROUND)**
Solvency projections are more mixed, however, with 56% of food service operators still indicating they are in jeopardy of financial collapse in the next 6-12 months. While this is a 21-point increase from March, it is relatively unchanged from the May rate of 58%, which is concerning. Hotels saw the highest rate of improvement from March with a 24-point gain in solvency confidence. Below are the comparisons from March to the present on the question “under the current business conditions, how long could your firm remain solvent?”
Projections on a "return to normal" timeline were also highly mixed. Responses to the question “when do you expect revenues at your firm to return to something close to pre-pandemic levels?” ranged from 68% of Resort/Campground sector respondents indicating conditions have already met or surpassed pre-pandemic levels to 69% of hotels predicting the second half of 2022 or later:
As we have noted publicly for some time, Minnesota’s hospitality industry is engaged in a multi-year economic recovery. If we are to achieve the full and robust economic health that our interdependent industry and state tourism & travel economy require, there is hard work ahead. Industry must work together with customers, employees, allies, and government to re-build a thriving hospitality industry in Minnesota.

Hospitality Minnesota would like to thank all of the operators that participated in the survey at what we know is an extremely busy and challenging time. This data is a critical part of how the new Hospitality Minnesota advocates for you with policymakers, communicates with the media, public, and other organizations, and shares critical insights and actionable intelligence with our members in real time.
Additional Observations

The survey results make it clear that just as the impact of the pandemic was uneven, so too will be the recovery. What appears as a “return to normal” may distract colleagues, policymakers, and the public from the true, full impact on the entire hospitality industry and the state’s economy. As we move forward, we must keep in mind that:

- Travelers and labor pools are attracted to areas that have a diversity of amenities and businesses; the loss of or lag in restaurants, hotels, performance and event venues may make some communities less desirable as destinations.
- Conversely, the relative boon for resorts and campgrounds may inoculate some communities from significant loss of those businesses that have struggled.
- Consumer behavior is evolving; while there are wider distinctions on where some might and might not go, most are currently willing to spend more than they have previously. It is uncertain how long that will last.
- What looks like “bustling” business in the coming months can mask the truth for many businesses that are trying to catch up and pay off debt, rather than getting ahead.
- While prices have risen for operators, many report anecdotally that they have not yet passed those increases on to consumers and are uncertain of the scale and reaction when they have to raise prices, which will likely impact overall consumer spending.
- The labor crunch will not be solved by the end of enhanced unemployment benefits because many hospitality workers are citing other reasons for not returning, including burn out and lack of child-care. Some experts suggest that it may take up to a decade to return to a full labor force.
- Depending upon the course of COVID and its variants, we could see more businesses become more seasonal, based on consumer confidence with indoor activities and labor availability.

For more information, contact:
Ben Wogsland
Director, Government Relations
ben@hospitalitymn.com
612.816.2936
Written Public Comment

Date: Sept. 27, 2021

To: Governor’s Council on Economic Expansion

From: Ali Goodir

Comment:

I didn’t get any grants 2019-2020. I need help for grant the state.
Email Correspondence

Date: Sept. 24, 2021
To: Paul D. Williams
From: Kari Johnson

Re: Homes for All ARPA Funding Recommendations

Hope you are doing well. With your role on the Governor’s Economic Advisory Council, I wanted to reach out to see if we can touch base (or at least share with you) regarding Homes for All’s advocacy work around the federal ARAP funds that the state will be allocating this next legislative session. Homes for All has been advocating for some of these resources to go to support housing programs since March/April of this year. Below is an updated request that has been submitted to the Governor’s Office through the online portal. Attached is a letter key lawmakers have sent as we have been in regular communication with them as well.

Let me know if you’d like to chat for a quick zoom meeting and also as an FYI, I’m also working on ARAP recommendations for the community economic development side.

Homes for All ARPA Housing Request:

Question 4) Public health; disadvantaged communities; renter and homeowner assistance

Question 5)

- Supportive Services & shelter support- $50 million
  - Funding for shelter and supportive housing programs to ensure people experiencing or at-risk of experiencing homelessness have access to shelters, transitional housing, supportive services and COVID mitigation and prevention.
  - Uses include: Emergency Services Program COVID-19 aid; technical assistance to implement Housing Stabilization Services; and more

- Preservation & Anti-Displacement- $300 million
  - Funding to preserve, acquire and rehab affordable multi- and single-family housing. Preservation and rehab programs can mitigate the home health risks that disproportionately impact renters and homeowners with low incomes, such as mold and mildew, asbestos, and radon and lead positioning.
  - Uses include: Public housing rehab; Naturally Occurring Affordable Housing (NOAH) preservation and acquisition; homeowner rehab; lead remediation; manufactured housing rehab, replacement and infrastructure

- Housing partners and local support- $55 million
- Capacity and financial support for local partners who have been working to distribute COVID-19 housing assistance and prevent evictions and foreclosures
  - Uses include: housing partner and provider capacity funds; tenant eviction defense (legal advice, legal services, and representation in court); homeowner counseling and foreclosure prevention; local housing trust fund match
- New development - $200 million
  - Uses include: shelter capital; homeownership opportunities; lowest income rental housing; supportive housing
- Emergency COVID-19 Housing Assistance - $20 million
  - Support the roll-out of both RentHelpMN and HomeHelpMN to prevent evictions and foreclosures
  - Uses include: additional funding for field partners; technical assistance dollars; eviction prevention dollars; additional dollars for COVID rental and homeowner assistance

Question 6)

Minnesota faced a housing crisis before the pandemic, but COVID-19 has exacerbated this crisis. Unsafe housing often means exposure to lead, asbestos-contaminated vermiculite, and mold, all which can cause health issues and are serious COVID-19 comorbidities. For people experiencing homelessness or who are unhoused, the risk and spread of COVID-19 may be more likely if shelter and services are provided in congregate settings with limited isolation or quarantine space and due to lack of access to health care. Lack of access to safe, stable, and affordable housing disproportionally impacts communities of color, heightening COVID-19 and public health inequities, while access to safe, affordable and stable housing is an essential public health intervention to mitigate the spread and risk of COVID-19. Use of the ARPA funds for housing across the continuum is called out as an eligible use throughout the Department of Treasury Interim Final Rule from May 10, 2021.

Thanks,

Kari Johnson

Senior Policy Advisor

Metropolitan Consortium of Community Developers
Dear Walz Administration,

We are following up on our request made on May 27, 2021 requesting that Governor Walz allocate flexible federal resources to preserve affordable housing and prevent displacement/homelessness of Minnesotans who are most at-risk as we come out of the pandemic. Since this request was initially made a number of changes have only intensified the need for action.

The pandemic continues to threaten housing stability for Minnesotans across the state. Just this week, the Star Tribune reported that Minnesota has the worst housing shortage in the nation. In the last year, sales of naturally occurring affordable housing (NOAH) properties have doubled, taking existing affordable housing away from our communities permanently. In addition, thousands of Minnesota renters continue to fall behind on rent and are at risk of eviction when our eviction moratorium off-ramp concludes on October 12. Challenges with delivery of rental assistance heighten the need for our attention and action to deliver help in a more timely fashion to more Minnesotans.

Fortunately, the legislature approved $500 million for a COVID Flexible Response Account. While those dollars have been allocated for a range of issues including funding for Minnesota Zoo and the Science Museum operations, they have not been utilized to preserve or create affordable housing for Minnesotans, one of the most pressing crises we face amidst the pandemic. Below you will see details of our targeted request for the Walz administration to utilize the COVID Flexible response account to preserve NOAH housing, improve delivery of rental assistance, establish lead safe homes, and finance affordable housing projects. We have worked with a range of housing advocates and stakeholders to ensure this request is aligned to the highest priorities facing our state in this urgent moment. Now is the time for action.

As we stated in May, without our action together in the here and now, we risk losing affordable housing that will be gone from our communities forever with incalculable consequences, especially our BIPOC communities. It is essential that we work together and take this opportunity to make these critical investments.

We request a meeting with Governor Walz and Commissioner Ho to discuss our request at their convenience.

Best,

Rep. Alice Hausman Housing Finance and Policy Committee, Chair
Rep. Michael Howard, Housing Finance and Policy Committee, Vice-Chair
Rep. Aisha Gomez, Preventing Homelessness Division, Chair
Sen. Kari Dziedzic, Housing Finance and Policy, Minority Lead

**Rental Assistance - $10M**

We are grateful for the team at Minnesota Housing that has worked for months to stand up a rental assistance program that is working to deploy hundreds of millions of dollars in assistance.
to Minnesotans. We are also mindful that federal restrictions have hampered the efficiency of these efforts. Still, rental assistance is not being deployed soon enough which threatens the housing stability for thousands of Minnesotans as the eviction moratorium mostly goes away on October 12. Changes are needed, which is why we are asking the Walz Administration to utilize $10 million in federal resources at your disposal for the expressed use to deliver rental assistance in a more timely fashion to renters and landlords. Our suggestions include:

**Increase resources for marketing and outreach**
A more robust marketing and communications campaign is necessary to reach all low-income renters, and those already experiencing homelessness, and landlords, as well as utility providers. We are acutely aware of the October 12 deadline of the eviction moratorium off-ramp. Especially given the challenges in getting resources deployed quicker, there remains urgency in getting renters who have fallen behind into the system.

**Increase resources for field partners**
Field partners providing outreach, application and housing navigation services are under resourced; funding for these services should be increased and additional partners with strong community connections added as contractors to help sign people up for rental assistance and help them navigate the process.

**Hire additional support staff to process rental assistance claims and assist renters and landlords**
The backlog in rental assistance processing appears to be at its core an IT challenge that requires significant staff time to work around. Given there does not appear to be a solution to the IT challenge in the near term, more staff is required to help process claims faster while providing accurate information and support to renters and landlords. We would encourage the creation of an on-call RentHelpMMN staff member(s) to be available to the courts, lawyers and applicants during court processing. We also encourage the creation of landlord assister positions to provide one-on-one case work to landlords.

**Decentralize rental assistance payments by contracting with additional partners**
RentHelpmn continues to struggle with significant IT challenges without a clear path to resolve core issues. As such, we suggest you consider deploying rental assistance dollars to entities that may be more nimble in delivering resources. Other entities such as the Zero Balance Project shows that a “leaner” operation may help get resources out the door sooner.

**NOAH Preservation/Homeless Prevention Fund: $50 Million**
Minnesota has an opportunity to preserve thousands of affordable homes in Qualified Census Tracts (QCTs) through the acquisition and preservation Naturally Occurring Affordable Housing (NOAH) properties. Between increased stress from COVID-19 and unique housing market conditions we are at increased risk of losing these housing units that fall outside of the
subsidized affordable housing market, yet they are home to low-income renters. Many of these properties have inadequate living conditions due to years of deferred maintenance due in part to lack of resources available. Once we lose these units, they are likely gone forever leading to displacement and gentrification.

Acquiring and preserving NOAH properties will support and build strong Minnesota communities for years to come. NOAH properties are often in areas with high levels of economic opportunity and mobility (as mentioned in the Building Stronger Communities eligible use of the State Aid American Rescue Plan funds according to the May 10, 2021 Department of Treasury Interim Guidance). At a time when we are potentially facing an impending end to the eviction moratorium, Minnesota cannot afford any more stress on its affordable housing market with the loss of these units.

Additionally, investments in preservation and rehab for low-income renters can mitigate home health risks, which is especially pressing as having a chronic lung disease can make a person more likely to be severely ill or die from COVID-19. Low-income Minnesotans and Minnesotans of color are disproportionately likely to live in unsafe and unhealthy homes, such as living with mold and mildew, drafty windows, asbestos-contaminated vermiculite, and risk of radon and lead poisoning. These unsafe housing situations can cause immediate and long-term brain and respiratory health issues, including increased risk of asthma, lung cancer, or mesothelioma. Investing in preservation and rehab can help mitigate serious COVID-19 comorbidities and address the disparities in public health outcomes, also listed as an eligible use of the State Aid American Rescue Plan funds.

**Establishes Lead safe homes grant program - $5M**
Communities of color and those with low incomes were already at greater risk for exposure to and poisoning from lead-based paint in Minnesota, and the pandemic has exacerbated these inequities. During COVID-19, children have spent substantially more time in their homes with lead-based paint, increasing their risk of developing elevated blood levels due to exposure time, while at the same time screenings for elevated blood lead levels have declined due to the pandemic. Elevated blood levels in children have often gone undetected over the past year and a half, posing an immediate and severe public health risk. The federal government recognizes the immediacy of this need by specifically listing remediation of lead-based paint and other lead hazards as an eligible ARPA State Fiscal Aid use under the “Eligible Uses to Address Disparities in Public Health Outcomes” section in the May 10, 2021 Department of Treasury Interim Final Rule. States such as New Jersey and Virginia have already utilized these resources for such efforts and Minnesota should take this step to address a pressing need as well.

**Gap financing for gaps created by supply chain delays due to COVID - $5 million**
Supply chain constraints and construction costs resulting from the COVID-19 crisis threaten the financial viability of housing deals that are currently in the development pipeline. Dozens of projects are in jeopardy because of new and unanticipated financing gaps caused by the COVID-19 pandemic.
Multifamily projects near closing are grappling with the challenge of securing anywhere between $250,000 to $1 million in additional financing. To overcome this challenge, one developer is increasing rents from 50 percent area median income (AMI) to 60 percent AMI. In another instance, a developer is waiting until the next funding cycle at Minnesota Housing, which means a project that could close this fall and begin construction next Spring. Single family projects are seeing the same challenges. Here, developers are also contemplating increasing AMIs served just to close gaps. Minnesota cannot afford to delay these needed projects. And, we cannot afford to decrease affordability. A minimal amount of funding will have an immediate and tremendous impact on the affordable housing development pipeline. Doing nothing could sacrifice affordability or risk delaying projects by as much as two years.
Email Correspondence

Date: Sept. 15, 2021
To: Governor’s Council on Economic Expansion
From: NASG Health

Re: American Rescue Plan

Dear Economic Council:

Governor Waltz announced yesterday the new economic council to help with the American Rescue plan. One of the goals of the American Rescue Plan was to improve air purification for schools. We work with schools, hospitals and business with air purification through FRESHlight negative ionization. Negative ions eliminate viruses, harmful bacteria, mold, mildew, and many industrial chemicals from the air. FRESHlight kills 99.9% of covid, staph infection, and MRSA. We are looking for the application to submit for schools to receive funding thru the American Rescue Plan. Could you please advise us as to how we can apply for this funding.

Thank You for you help.

Blaine Marcou

Vice President of Development
The sales and distribution arm of FreshLight and FreshWater

Solutions
Problems Facing Health Care Facilities

- Staff and Patient Safety
- Hospital Acquired Infection
- MRSA, Staph, Strep,
- C. Diff, Odors
- Bed Sores
- And of course Corona
What is Ionization?

Ionization is the process by which an atom loses an electron.

By applying ionization, the AIR is purified 24 hours a day, (fine) dust, odor, and pathogens (bacteria, viruses, and fungi).
Negative ionization technologies all but eliminate the ....

PATHOGENIC LOAD.

And have for decades

<table>
<thead>
<tr>
<th>Target Material</th>
<th>Type</th>
<th>Testing &amp; Verification Organization</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virus</td>
<td>Corona virus</td>
<td>Kitasato Institute Medical Center Hospital</td>
<td>July 2004</td>
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<tr>
<td></td>
<td>Influenza virus</td>
<td>Kitasato Research Center of Environmental Sciences</td>
<td>Sept. 2002</td>
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<td>Seoul University, Korea</td>
<td>Sept. 2003</td>
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<tr>
<td></td>
<td></td>
<td>Shanghai Municipal Center for Disease Control and Prevention, China</td>
<td>Dec. 2003</td>
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<tr>
<td></td>
<td></td>
<td>Kitasato Institute Medical Center Hospital</td>
<td>Feb. 2004</td>
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<td></td>
<td>Coxsackie virus</td>
<td>Kitasato Research Center of Environmental Sciences</td>
<td>Sept. 2002</td>
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<tr>
<td></td>
<td>Polio virus</td>
<td>Kitasato Research Center of Environmental Sciences</td>
<td>Sept. 2002</td>
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<td>Allergens</td>
<td>Mite allergen (dust from dead mite bodies and feces)</td>
<td>Graduate School of Advanced Sciences of Matter, Hiroshima University</td>
<td>Sept. 2003</td>
</tr>
<tr>
<td></td>
<td>Pollen allergen (cedar pollen)</td>
<td>Graduate School of Advanced Sciences of Matter, Hiroshima University</td>
<td>Sept. 2003</td>
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<tr>
<td>Bacteria</td>
<td>MRSA (methicillin-resistant Staphylococcus aureus)</td>
<td>Kitasato Research Center of Environmental Sciences</td>
<td>Sept. 2002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kitasato Institute Medical Center Hospital</td>
<td>Feb. 2004</td>
</tr>
<tr>
<td></td>
<td>Coliform bacteria (E. coli)</td>
<td>Ishikawa Health Service Association</td>
<td>Sept. 2000</td>
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<tr>
<td></td>
<td>Bacilli</td>
<td>Kitasato Research Center of Environmental Sciences</td>
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<tr>
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<td>Bacteria (Coliform bacteria, Staphylococcus)</td>
<td>Shanghai Municipal Center for Disease Control and Prevention, China</td>
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<tr>
<td>Fungi</td>
<td>Cladosporium (black mold)</td>
<td>Ishikawa Health Service Association</td>
<td>Sept. 2000</td>
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</tbody>
</table>
Philip Tierno Professor of clinical microbiology and pathology at New York University School of Medicine.

- Ions cause a chemical reaction on the cell membrane surface that inactivates the virus. They can inactivate 99.9% of pathogens in minutes.
- They also damage the so-called spikes of coronaviruses, which they use to infect host cells.
- They become inactive as a result.
HOW NEGATIVE IONS HELP?

Negative ions cause dust particles to clump together making them too heavy to float so they fall to the ground.

Negative ions eliminate viruses, harmful bacteria, mold, mildew, and many industrial chemicals, from the air.
BI-POLAR VS UNI-POLAR IONIZATION

- Each Ion bar safely creates up to a BILLION negative ions every second, not a 60/40 Split!
- Our ionizing brushes are made from fiber optic cable material which are carbon coated.
- We do not use metal bars or pins.
- WE DO NOT CREATE OZONE
**Ventilation systems in homes, churches and offices**

**Ionizing air affects influenza virus infectivity and prevents airborne transmission**

<table>
<thead>
<tr>
<th>Ventilation systems in homes, churches and offices</th>
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<tbody>
<tr>
<td><strong>Scientific Reports</strong></td>
</tr>
<tr>
<td>OPEN</td>
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<tr>
<td>Ionizing air affects influenza virus infectivity and prevents airborne transmission</td>
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**Efficiency of PlasmaCutter™ Technology on Various Pathogens (Note: 1)**

<table>
<thead>
<tr>
<th>Pathogen</th>
<th>Type</th>
<th>Location</th>
<th>Date</th>
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<tr>
<td>Virus</td>
<td>Clinical</td>
<td>Atlanta Medical Center</td>
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<td>Influenza</td>
<td>Emory University</td>
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<td>Georgia State University</td>
<td>Feb. 2023</td>
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<td></td>
<td></td>
<td>Gwinnett County Medical Center</td>
<td>Dec. 2023</td>
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<tr>
<td></td>
<td></td>
<td>Emory University</td>
<td>Sept. 2023</td>
</tr>
<tr>
<td></td>
<td></td>
<td>College of Environmental Sciences</td>
<td>Sept. 2022</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emory University</td>
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<td></td>
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<td>Emory University</td>
<td>Sept. 2022</td>
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</tbody>
</table>

**Investigation report**

Studies on the cleaning performance of a Brink KWL/Freshlight ionster filter unit

("Pure Induct")

DMT-Report number: APS 22-00 032 20

Clinically Researched, University and Lab Tested
CURRENT USE
in healthcare

Brink HVAC, hospitals, emergency rooms, dental clinics,
HVAC is the 1st choice for trying to manage large areas of people.

THIS IS A GOOD FIRST STEP!

UNFORTUNATELY! There are too many uncontrolled variables, DOORS, WINDOWS, AIR FLOW, NUMBER of PEOPLE to be effective.

While we believe strongly in HVAC ionization, this is simply a REDUNDANT system.
IONCLEAR Specializes in...

Our LAIS technologies allow us to meet all of the ionization requirements of nearly every enclosed space.

We account for an array of variabilities that include air-flow, ancillary ventilation, doors, windows, and the concentration of people in each localized area.
Our Ion Star – Technology for HVAC, ceilings, windows, and doorways, in large and small spaces
The NEXT STEP

- Choose a pilot location or floor
- Schedule a site review
- Cost Analysis & Proposal
- Installation
- Evaluate Results
Purpose of the Study

The purpose of this study is to document the antimicrobial efficacy of Fresh Light's Test Device.

Study Timeline

<table>
<thead>
<tr>
<th>Devices Received</th>
<th>Cultures Initiated</th>
<th>Chamber Run</th>
<th>Nebulization Initiated and Treatment</th>
<th>Enumeration Plates Evaluated</th>
<th>Report Delivered</th>
</tr>
</thead>
<tbody>
<tr>
<td>21APR2021</td>
<td>21JUN2021</td>
<td>21JUN2021</td>
<td>21JUN2021</td>
<td>22JUN2021</td>
<td>09JUL2021</td>
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<td></td>
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<td>Control Run</td>
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<tr>
<td>21APR2021</td>
<td>01JUL2021</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Test Run</td>
<td></td>
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</table>
Criteria for Scientific Defensibility of a Custom Device Study

For Microchem Laboratory to consider a Device Study study to be scientifically defensible, the following criteria must be met:

1. The average number of viable bacteria, fungi, or bacteriophage recovered from the time zero samples should be approximately $1 \times 10^5$ cells/m$^3$.
2. Positive/Growth controls must demonstrate growth of the appropriate test microorganism.
3. Negative/Purity controls must demonstrate no growth of test microorganism.
4. The neutralization test suspension must be $\geq 70\%$ of that recorded for the neutralization control suspension count.

Passing Criteria

Because of the nature of the study, passing criteria may be determined by the Study Sponsor.

Testing Parameters used in this Study

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
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<tbody>
<tr>
<td>Volume of inoculum added to Nebulizer</td>
<td>20.0 ml</td>
</tr>
<tr>
<td>Sampler Media (Volume)</td>
<td>Phosphate buffered saline (20.0 ml)</td>
</tr>
<tr>
<td>Sampling Time</td>
<td>10 minutes</td>
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<tr>
<td>Sampling Type</td>
<td>Impingers, SKC biosamplers</td>
</tr>
<tr>
<td>Incubation Temperature</td>
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<tr>
<td>Nebulization Time</td>
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<tr>
<td>Neck Rinse Media (Volume)</td>
<td>Phosphate buffered saline (5.0 ml)</td>
</tr>
<tr>
<td>Contact Times</td>
<td>Time zero</td>
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<tr>
<td></td>
<td>15 minutes</td>
</tr>
<tr>
<td></td>
<td>30 minutes</td>
</tr>
<tr>
<td></td>
<td>60 minutes</td>
</tr>
<tr>
<td></td>
<td>90 minutes</td>
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<tr>
<td>Enumeration Media</td>
<td>50% Tryptic Soy Agar</td>
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<tr>
<td>Incubation Time</td>
<td>18-24 hours</td>
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</tbody>
</table>
Study Notes:

Test device was set up per study sponsor instructions, ionizer was hung from ceiling of chamber approximately 6 feet above the ground.
## Results of the Study

<table>
<thead>
<tr>
<th>Test Microorganism</th>
<th>Test Device</th>
<th>Treatment Time Point</th>
<th>Replicate</th>
<th>PFU/m³</th>
<th>Percent Reduction Compared to Time Zero</th>
<th>Log₁₀ Reduction Compared to Time Zero</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MS2 Bacteriophage ATCC 15597-B1</strong></td>
<td>N/A</td>
<td>Inoculum</td>
<td>N/A</td>
<td>4.70E+09</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Time Zero</td>
<td>Replicate 1</td>
<td>9.16E+07</td>
<td>N/A</td>
<td>52.48%</td>
<td>0.32</td>
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<tr>
<td>15 minutes</td>
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<td>4.35E+07</td>
<td>N/A</td>
<td>86.26%</td>
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<td>30 minutes</td>
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<td>1.26E+07</td>
<td>N/A</td>
<td>90.93%</td>
<td>1.04</td>
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<tr>
<td>60 minutes</td>
<td>Replicate 1</td>
<td>8.30E+06</td>
<td>N/A</td>
<td>96.80%</td>
<td>1.49</td>
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<tr>
<td>90 minutes</td>
<td>Replicate 1</td>
<td>2.93E+06</td>
<td>N/A</td>
<td>99.46%</td>
<td>2.27</td>
<td></td>
</tr>
</tbody>
</table>

Inoculum is enumerated as PFU/ml. All other enumerations are PFU/m³.

1 The Log reductions for the Test Runs are adjusted to account for natural die-off and gravitational settling observed in the Control Run.

<table>
<thead>
<tr>
<th>Test Microorganism</th>
<th>Test Device</th>
<th>Treatment Time Point</th>
<th>Replicate</th>
<th>PFU/m³</th>
<th>Percent Reduction Compared to Time Zero</th>
<th>Log₁₀ Reduction Compared to Time Zero</th>
<th>Adjusted Log₁₀ Reduction Compared to Baseline</th>
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</thead>
<tbody>
<tr>
<td><strong>MS2 Bacteriophage ATCC 15597-B1</strong></td>
<td>Fresh Light Ionizer</td>
<td>Inoculum</td>
<td>N/A</td>
<td>2.50E+10e</td>
<td>N/A</td>
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<tr>
<td>Time Zero</td>
<td>Replicate 1</td>
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<td>N/A</td>
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<td>15 minutes</td>
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<td>1.51</td>
<td>0.65</td>
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<td>30 minutes</td>
<td>Replicate 1</td>
<td>2.60E+06</td>
<td>96.92%</td>
<td>2.27</td>
<td>1.22</td>
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<td>2.88</td>
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<tr>
<td>90 minutes</td>
<td>Replicate 1</td>
<td>1.11E+05e</td>
<td>99.87%</td>
<td>2.88</td>
<td>1.38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Inoculum is enumerated as PFU/ml. All other enumerations are PFU/m³.

1 The Log reductions for the Test Runs are adjusted to account for natural die-off and gravitational settling observed in the Control Run.