



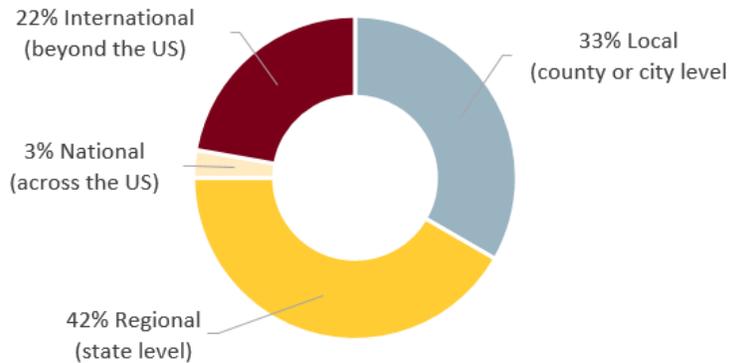
# 2020-2021 Capstone Project List

## Summary:

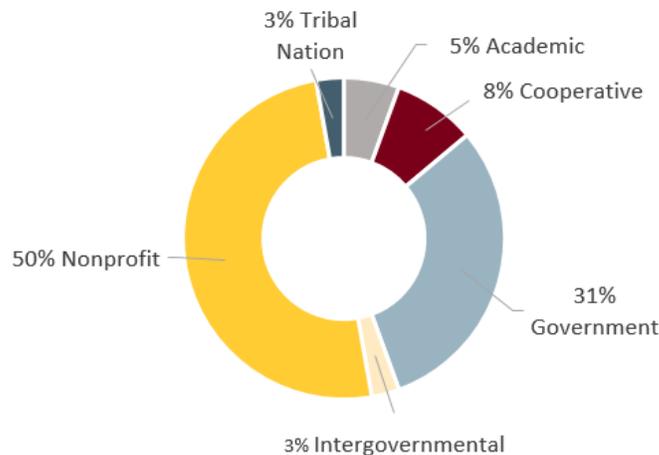
The Capstone Program at the Humphrey School in academic year 2020-2021 (spring & summer)

- involved **10** HHH faculty,
- overseeing **33** capstones,
- involving **126** students,
- collaborating with **33** distinct partners.

Partners by Sector



Partners by Scope



The following Capstone Projects encompassed a minimum of **15,876** hours of student-led work.

# Spring 2021

Global Policy  
Faculty: Mary Curtin  
Projects: (3)

## [Improving Data Collection on Nonproliferation Assistance Projects and Programs Using Social Media](#)

The primary purpose of this capstone research project was the exploration of state-managed social media as a viable methodology to fill knowledge gaps in known assistance programs and projects by member states regarding the activities pertinent to the United Nations' Resolution 1540. To this end, six states were chosen to narrow the focus of the team's research, and following the creation of a methodology, their social media apparatuses were examined for useful and relevant information.

**Community Partner:** The Stimson Center

**Team:** Hannah Frey (MPP 2021), JT Kruger (MPP 2021), and Jacob Sprunger (MPP 2021)

## **Foreign Direct Investment and National Security: Case Studies**

Within the past ten years, there has been a global reconsideration of what national security entails. As a result, numerous countries have introduced or significantly amended current FDI policies, specifically with national security in mind. National security has been redefined more expansively, as something that can be threatened by a multitude of issues, such as terrorism, finance, technology, climate change, public health, or inequality. These developments indicate rising protectionism and have implications for global value chains, technology trade, and business compliance. In this research project securitization of FDI was analyzed through three different case studies of three different countries; Japan, the Philippines, and South Africa. It was determined that for The Philippines and South Africa, national security issues are less pressing and remain a lower priority than economic advancement during the pandemic. As such, enacting stricter FDI regulations, which would likely decrease FDI flow, is unlikely until economic stability is achieved. However, in Japan, which already had strict FDI restrictions concerning national security before the pandemic, the economic viability of these regulations is less concerning.

**Community Partner:** The Stimson Center

**Team:** Kyle Andersen (MPP 2021), Erik Haugen (MPP 2021), Ta'Mara Hill (MHR 2020)

## **Centralization and COVID-19 Recovery: Comparative Analysis of Morocco, Jordan, and Tunisia**

Insufficient responses to the needs of citizens during the COVID pandemic have exposed the lack of transparency, responsiveness, and accountability that characterize many governments in the Middle East and North Africa (MENA) region. These features have exacerbated many of the negative consequences of the pandemic. In this paper, we seek to address the deficit in information about how relative levels of decentralization have affected government responses to COVID, as well as how the COVID crisis may have affected the trajectory of decentralization in these countries.

**Community Partner:** International Republican Institute

**Team:** Chris Grathwol (MHR 2021), Sara Ragab (MDP 2021), Alheen Mahmud (MDP 2021), Miles Wilburn (MPP 2021)

Human Rights  
Faculty: Amelia Shindelar  
Projects: (2)

### **Project details unavailable**

Leadership and Management  
Faculty: Zhirong "Jerry" Zhao  
Projects: (3)

### **Evaluating Hennepin County's 2020 Emergency Rental Assistance Program**

In the spring of 2020, Hennepin County created the Hennepin Emergency Rental Assistance (HERA) program with federal Coronavirus Aid, Relief, and Economic Security Act (CARES Act) funds to assist low-income renters with emergency housing payments. The county hoped to use HERA funds to assist renters most at risk of losing their housing. Among vulnerable renters, HERA sought to prioritize renters of color to further the county's racial equity goals. For our first research question, we looked at the targeting of HERA program funds overall and of the program's tenant and landlord application portals. For our second research question, we examined how accessible HERA was by comparing its level of administrative burden to similar emergency housing assistance programs administered by peer counties.

**Community Partner:** Hennepin County

**Team:** Elika Beck (MPP 2021), Mardi Crean (MPP 2021), Samuel Estes (MPP 2021), Madeline Geitz (MPP 2021), Emilio Vega (MPP 2021)

### **[Equity in Minnesota State Grantmaking](#)**

The state grantmaking process was not originally designed with equity as the organizing principle. As such, it is unsurprising to learn that nonprofit organizations in Minnesota led by and/or serving Black, Indigenous, and People of Color (BIPOC) receive less state funding than white-led organizations. In recent years, there has been an increasing focus on community involvement when it comes to social service provision. Grassroots activism has elevated participatory funding as an equitable solution to the inequities present in grantmaking processes across the board, whether coming from the state or foundations. Communities know best what they need, and embedded community organizations are well-positioned to communicate these needs and execute the programs necessary to meet them. Unfortunately, the state of Minnesota takes a top-down approach, with agency personnel specifying what programs will be created, and thus funded, rather than asking communities what their needs are. In addition, this disconnected top-down approach leads to an application process that is overly burdensome and does not accurately capture the success of the organizations applying for state funding. Several foundations, both local and national, have taken up the call for centering racial equity in earnest and have implemented innovative giving models that directly engage community members.

Three of these foundations are discussed in this report, to illustrate the potential frameworks the state of Minnesota could adopt to increase racial equity in the state grantmaking process.

**Community Partner:** Minnesota Council of Nonprofits

**Team:** Nicolette Gullickson (MPP 2021), Wendy Jones (MPA 2021), Lilian Sand (MPP 2021), Jiapeng Yan (MPP 2021)

### [The Social Science Case for a Flexible Benefit Set](#)

The Flexible Benefit Set (FBS) is an integral part of Pathways to Prosperity and Wellbeing (P2PW), a human-centered design initiative to reform human services in Dakota County and Olmstead County. The FBS addresses the need to remodel public assistance delivery by streamlining funding through a single payment source and eliminating restrictions on how participants can spend public benefits. Our study examined the social science literature pertaining to five core principles of the FBS's design: accessibility, centering equity, trusting families and flexibility, raising benefit cut-offs to the level of a living wage, and eliminating benefit cliffs.

**Community Partner:** Dakota County

**Team:** Tyler Hurley (MPA 2021), Tegan Lecheler (MPP 2021), Laura Proescholdt (MPP 2021), Isabelle Schoppa (MPP 2021), Bridget Siljander (MPA 2021)

Program Evaluation

Faculty: Emily Kalnicky

Projects: (3)

### [Barriers to Wayfinding in Downtown St. Paul: An Evaluation](#)

As the capital of Minnesota, St. Paul is known for its host of award-winning restaurants, the Mississippi riverfront, and large entertainment venues. Although the downtown area is easily walkable, our client, the CapitolRiver Council (CRC), has heard from residents, visitors, cultural institutions, and businesses alike that people sometimes struggle to figure out their way through the skyways or streets and that zoning requirements that prevent exterior signage may make parts of downtown seem confusing and desolate. This evaluation sought to understand the barriers to wayfinding present in downtown St. Paul so the CRC can better advocate for improvements to the system.

**Community Partner:** CapitolRiver Council

**Team:** Sarah Ritten (MPP 2021), Emma Wu (MPP 2021)

### [Hands Across the World: Evaluation Plan and Preliminary Results](#)

Hands Across the World (HAW) has four organizational goals for supporting newly arrived immigrants and refugees into American society. Their goals are cultural settlement, social adaptation, economic adjustment, and political integration. The educational programming that HAW offers is a complex system that involves volunteers, various participants of different nationalities and cultures, a culturally responsive curriculum, and various community partnerships. This evaluation report focuses on the efficacy of the HAW programming in achieving its main goal of supporting newly arrived immigrants and refugees into American society and ultimately leading families to live successful lives in their respective communities.

**Community Partner:** Hands Across the World

**Team:** Kania Johnson (MPP 2021), Meghna Subba (MDP 2021)

### **Minnesota Zoo's Operation Curiosity and Wonder: Evaluation of a Curriculum Program**

In spring of 2020 and during the middle of the COVID-19 pandemic and statewide shutdown, the Minnesota Zoo developed a science curriculum program for K-5 teachers that addressed newly adopted science standards developed by the state of Minnesota. The curriculum could be used by teachers teaching remotely as an analogue (off-line) resource to increase access to learning resources without technology being a barrier. Titled "Operation Curiosity and Wonder" (OCW), this new curriculum was passed out to schools and teachers for immediate use. Although the OCW curriculum provided good science content, it likely saw minimal use due to time pressures from the pandemic, a wealth of competing resources, and a preference among teachers for digital (not analog) content. Accessibility of curriculum is an ongoing discussion among educators, and while OCW's format favors accessibility in one sense, there remain barriers.

**Community Partner:** Minnesota Zoo

**Team:** Sam Storck-Post (MPP 2021), Leslie Yetka (MPA 2021)

## Public Engagement

Faculty: LisaBeth Barajas

Projects: (2)

### **Public Engagement: Urban Tree Canopy Update**

The City of Woodbury has identified critical success factors related to environmental stewardship as part of its 2040 plan. A core area of focus is improving the city's urban forest, with significant public investments being made to increase its urban tree canopy. The main goals of the initiative include: equitably increasing the city's percentage of tree canopy coverage; and reviewing and updating the approved tree species list to address plant diversity, introduction of pests, and shifting plant hardiness zones. The City recognizes that any decisions made to increase the urban tree canopy need to be made in partnership with a broad group of stakeholders. In an effort to ensure appropriate public engagement for this initiative, the City has partnered with the University of Minnesota through its Resilient Communities Project to develop proper guidance for public engagement.

**Community Partner:** Metropolitan Council and City of Woodbury

**Team:** Bill Baker (MPP 2021), Jamie Kennedy (MURP 2021), Kathryn Stower (MURP 2021), Naomi Rodiles (MPA 2020)

## Project details unavailable

Science, Technology and Environmental Policy (STEP)

Faculty: Greg Lindsey

Projects: (3)

### **Co-Creation to Heal Collateral Damage: Strategic Engagement Plan for a Just Approach to Brownfield Redevelopment in the Twin Cities**

This strategic engagement plan was completed to assist Minnesota Brownfields (MB) in shifting practices to further focus on equity and environmental justice. This shift in perspective comes following similar shifts from a major funder of MB and at a time of heightened discussion of inequality, particularly in and around Minneapolis. It was written using the mapping and visualization analysis and key community interviews discussed in the Co-Creation to Heal Collateral Damage Report.

**Community Partner:** Minnesota Brownfields

**Team:** Brynna Bargfeld (MPP 2021), Clare Riley (MURP 2021), Kyle Malone (MURP 2021)

### **Great River Energy: Water Heater Potential and Application**

This report provides analysis and recommendations about demand-side management programs involving water heaters at the energy cooperative Great River Energy (GRE). We provide an introduction with background on GRE and water heater (WH) demand-side management (DSM) technology. We then highlight two case studies. The first case study examines WH DSM programs used at utilities comparable to GRE and provides context into how GRE could learn from what peer utilities do. The second case study turns internal and looks at the existing web-based communication strategies of GRE's 28 member-owner cooperatives. We conducted interviews with member-owner co-ops and WH wholesalers and technicians to gain insight into how GRE can better facilitate load management and improve communications about these programs. We conclude with recommendations and example communication methods.

**Community Partner:** Great River Energy

**Team:** Sophie Blumenstock (MURP 2021), Katrina Little (STEP 2021), Jamie Stallman (STEP 2021), Natalie Townsend (MPP 2021)

### **WCROC Farm Sustainability Project: Considering Online Decision Support Tools**

The University of Minnesota's West Central Research and Outreach Center (WCROC) is aiming to provide an online decision support tool to farmers that will help them improve the sustainability and resiliency of their operations. We investigated the various forms decision support tools can take, and the factors that affect their uptake and use by farmers. There are 15 variables and eight "core factors" affecting tool use including: cost, ease of use, peer recommendation, and relevance to users. In designing a tool that is easy to use and relevant to farmers, there are a wide array of metrics and indicators that could be used. At a time when sustainable agriculture policy, incentives, and metrics are rapidly evolving, we believe WCROC can best meet its goals by working with farmers to consider the design elements of an online decision support tool, focusing on the key variables including accessibility and ease of use. Additionally, a WCROC platform should provide a platform which builds farmers' social capital and enhances farmer-

to-farmer communication and learning. Providing a forum that captures and shares farmers' personal knowledge and experiences will help farmers engage with the online tool and convert new knowledge into new farming practices.

**Community Partner:** University of Minnesota West Central Research and Outreach Center

**Team:** Michaela Carlson (STEP 2021), Rob Kretz (MURP 2021), Lindsey Krause (STEP 2021), Rachel Hauber (STEP 2021)

Social Policy

Faculty: Maria Hanratty

Projects: (2)

### [Strategies to Improve Point-In-Time \(PIT\) Counts of Unsheltered Homelessness: An Evaluation of Hennepin County's Current Approach and Summary of Lessons Learned from Other Communities](#)

The Hennepin County Office of Housing Stability requested assistance from students at the Humphrey School of Public Affairs to conduct a study about how best to reform and improve their point-in-time (PIT) count of people experiencing homelessness. The Hennepin County CoC's PIT counts of both sheltered and unsheltered people experiencing homelessness contribute to the determination of federal funding received to support the County's population experiencing homelessness. Current counting methods are resource-intensive—particularly for the unsheltered count—and likely yield an underestimate of people experiencing homelessness. These concerns have led to skepticism about the practicality of the PIT count, as well as confusion around funding allocations.

**Community Partner:** Hennepin County

**Team:** Susan Bergmann (MURP 2021), Rowan Hilty (MPP 2021), Ashley Hirilall (MPP 2021), Lauren Kraft (MPP 2021)

### [Watching the Watchers: An Examination of the Minnesota Office of Ombudspeople for Families and Recommended Reforms to Expand Ombudspeople Services for Minnesota Foster Youth](#)

Our team of four graduate students from the University of Minnesota Humphrey School of Public Affairs, in partnership with Foster Advocates of Minnesota, evaluated the current capacity of the Minnesota Office of Ombudspeople for Families (OBFF) to serve foster youth. Foster children and youth in Minnesota are vulnerable to cracks in the child welfare system, and are disproportionately at risk of homelessness, disruption to education, poor mental health, and adverse childhood experiences (ACEs). Through our research of states with both children and family ombudspeople, as well as foster youth ombudspeople, we found that foster youth in Minnesota currently lack access to the OBFF, and may benefit from having an ombudspeople equipped to investigate their specific complaints and to advocate for systems change on their behalf.

**Community Partner:** Foster Advocates

**Team:** Samantha Flax (MHR 2021), Jerica Gomez (MURP 2021), Suriya Vijayasathy (MPP 2021), Emily Zaffiro (MPP 2021)

### **Health Equity in the Ramsey County Transportation System**

This report, created for Ramsey County Public Works, investigates the current state of the transportation system owned and maintained by Ramsey County. This includes lanes for vehicles, adjacent bike lanes, sidewalks, and other public transportation infrastructure that shares space within and alongside roadways. The report identifies transportation related factors contributing to health equity and introduces a vision for health equity in the future, followed by actions that the Ramsey County Public Works Department should take to advance health equity.

**Community Partner:** Ramsey County Public Works

**Team:** Addison Coley (MURP 2021), Benny Manibog (MURP 2021), Cody Flannery (MURP 2021), Doug Benton (MURP 2021), Sarah Paulus (MURP 2021)

### **Fare Free Future**

The COVID-19 pandemic radically altered Metro Transit's revenue system, likely with lasting change to transit ridership. This disruption is an opportunity to evaluate Metro Transit's fare system.

This report provides recommendations to reach a vision for a simplified and more equitable fare system. These recommendations are developed from background information on Metro Transit and its riders, documentation of existing conditions, review of relevant literature, and interviews with stakeholders and subject matter experts. Recommendations focus on the conceptual level and center all-purpose riders.

**Community Partner:** Metro Transit

**Team:** Dillon Cummins (STEP 2021), Caroline Ketcham (MURP 2021), Erika Shepard (MURP 2021), Jed Hanson (MURP 2021)

### **Building Community, Embracing Difference: Immigrants, Refugees, and Local Government Outreach in Rural Minnesota**

Immigrant and refugee populations in Greater Minnesota face distinct challenges and have distinct needs. Government responsibility for the wellbeing of immigrant and refugee populations in rural Minnesota is shared across state, county, and city levels. Government actions can be augmented by community groups and local employers, but all groups have the potential to play an improved role ensuring those who have settled in rural Minnesota continue to feel welcome, respected, and represented in their community. A growing body of literature on rural America's relationship with international migration highlights the influence of effective government communication and representation on successful integration, access to services, and social cohesion. This report draws upon the established body of research and interviews with twenty government staffers, elected

representatives, and community members from four sample cities in rural Minnesota. These interviews assessed government perceptions of issues facing local immigrant and refugee communities and, in turn, how well connected these local governments are to those populations.

**Community Partner:** The Center for Rural Policy & Development

**Team:** Elizabeth Gehlen (MPP 2021), Josiah Moore (MPP 2021), Whitney Oachs (MPP 2021), Ryan Redmer (MPP 2021)

### [Urban Flourishing: BioSolar's Effects on Urban Heat Islands & Implications for Equity and Gentrification](#)

The Minnesota Metropolitan Council sought support for its Surface with Purpose tool, an application that projects the potential benefits of green roofs, solar photovoltaic panels and integrated BioSolar systems on public and commercial properties. This report addresses two research questions for further development of this tool: 1) To what extent do BioSolar systems impact the Urban Heat Island Effect? 2) What equity and gentrification considerations are important for policymakers to keep in mind when designing BioSolar System policies? Are BioSolar systems on commercial and public properties associated with an increased likelihood of surrounding neighborhoods to gentrify?

**Community Partner:** Metropolitan Council

**Team:** Morgaine Butler (MPP 2021), Jessy Countney (MURP 2021), David Gottfried (MPP 2021), Nathan Vikeris (STEP 2021)

### [Planning for Economic Development and Resilience Post Covid-19](#)

As the Covid-19 pandemic was still sweeping across the nation, the City of Minnetonka took the proactive step to investigate strategies for promoting economic development and resilience post Covid-19. This involved researching the impacts to their economy and compiling a list of strategies to respond. The major economic impacts felt by the Covid-19 pandemic fall into four categories, impacts to businesses, workers, local governments, and consumers. In an attempt to lessen these economic impacts, federal, state, county, and local governments throughout the country enacted numerous strategies to provide relief. To help the City of Minnetonka promote economic development and resilience, this report provides a series of recommendations with varying levels of urgency. Our most urgent recommendations include strategies for emerging from the pandemic smoothly. These focus on immediate concerns and promote continuing some existing strategies. The next series of recommendations focuses on long-term success for the city. Finally, our last set of recommendations were included to prepare for a future crisis with similar impacts to the Covid-19 pandemic. These recommendations are aimed at reducing the negative impacts from the start and helping city staff navigate the crisis more effectively.

**Community Partner:** City of Minnetonka

**Team:** Andre Ingram (MPP 2021), Paul Daniels (MURP 2021), Stephen Jensen Estevez (MURP 2021), Yuanyuan Zhou (MURP 2021)

### [Trail demand calculator: A public utility for trail use estimation](#)

Shared-use trails are an important and expansive investment for the wellbeing of Minnesotans. For our capstone we researched qualities related to trails to develop a trail demand model. This model became the foundation for an interactive trail demand calculator that allows users to estimate trail use.

**Community Partner:** Parks & Trails Council of Minnesota

**Team:** Jenny Ackerson (MURP 2021), Raymond Eliot (MURP 2021), Ian Jacobson (MURP 2021), Zoey Sai (MURP 2021)

### [Planting the Seeds of Change: Germinating a Greener Future An Exercise in Co-Creation](#)

The nascent and burgeoning realm of co-creation in community formed the basis for this project. The central realm: food sovereignty and food justice organizations on the Northside of Minneapolis. Our goal was to create materials that could easily be edited, expanded, and updated over time to provide the greatest use to Project Sweetie Pie (PSP) and its partners. Our work should be contextualized as a first “phase” for making collaboration on food, climate, racial, social, and economic justice in Minneapolis more effective and efficient in the months and years to come. While the work described in this report further grows roots for the organization, further phases will flower and harvest the fruits of this labor to strengthen the work of PSP.

**Community Partner:** Project Sweetie Pie

**Team:** Kathy Ahlers (MPA 2021), Anna Crouch (MURP 2021), Matthew Gabb (MURP 2021), Keith Wyne (MPA)

### [Multi-modal wayfinding in St. Louis Park](#)

St. Louis Park is home to many popular trails and parks, as well as shopping centers and other important community resources. It is important that residents and visitors understand how to access all the destinations St. Louis Park has to offer. A wayfinding system designed for the needs of pedestrians, cyclists and transit users in St. Louis Park will aid people in navigating the city. It can also increase people’s comfort level when using non-vehicular modes of transportation and can even encourage people to walk, bike or take the bus more often. This project, led by four Master’s of Urban and Regional Planning students at the University of Minnesota, provides St. Louis Park staff the background, engagement tools, key considerations, and program and cost estimates they need to implement a wayfinding system within the city. The project employs a Race Equity & Inclusion (REI) lens to ensure the wayfinding system benefits all residents and provides special consideration for BIPOC (Black, Indigenous and People of Color) communities.

**Community Partner:** City of St. Louis Park

**Team:** Meredith Benesh (MURP 2021), Katie Emory (MURP 2021), Melissa Duhn (MURP 2021), Chris Hong (MURP 2021)

Capstone in Development Practice (MDP 5200)

Faculty: David Wilsey

Projects: (3)

**Project details unavailable**

# Summer 2021

## Leading Organizational and Community Change

Faculty: Robin Phinney

Projects: (4)

### [Equity in Banking and Lending - Project Findings and Next Steps](#)

The community is poised to address issues related to disparities in access and quality of banking & lending options and solutions for African Americans in North Minneapolis in particular. This project seeks to understand the dynamics of barriers, assets, and potential solutions related to banking and lending specifically for African American-owned small businesses in North Minneapolis. In assessing this issue, the Capstone team and community partners hope this will be the starting point in a collaborative effort including the banking & business community to address some of the issues raised in this research project.

**Community Partner:** UMN Urban Research and Outreach-Engagement Center (UROC) and the Minnesota Department of Commerce

**Team:** John Mbali (MPA 2021), Aaron S. Williamson (MPA 2021), Jessica Arika (MPA 2022), Blanca Martinez Gavina (MPA 2021)

### [Improving Transparency and Oversight of Emergency Medical Services in Minnesota](#)

**Abstract/** This project was completed as part of a partnership between the Minnesota State Fire Chiefs Association (MSFCA) and the University of Minnesota's Resilient Communities Project. The goal of this project was to examine the efficacy of public and private EMS service delivery in Minnesota. The capstone team conducted a comparative analysis and policy interviews and provided guidance and recommendations for how to approach revising current state EMS policy.

**Community Partner:** Minnesota State Fire Chiefs Association

**Team:** Maya Beecham (MPA 2021), Ander Bolduc (MPA 2021), Dieudonne Kabaso (MPA 2022), Kaitlin Ostlie (MPA 2021)

### [Advocating for Education Equity: Strategies and Opportunities for Great Expectations](#)

Minnesota's educational disparities are well-documented. In recent years, the state's sizable gaps in academic achievement have generated increasing attention as the state grapples with racial and ethnic disparities across a range of socio-economic outcomes. While Minnesota is consistently ranked as one of the best places to live in the United States, Minnesotans of color, and Black Minnesotans in particular, lag behind their white neighbors in employment rates, wage and household income levels, levels of home ownership, and levels of educational attainment. This report provides the Great Expectations (GE) initiative with an overview of the most salient issues being debated at the state level around educational disparities and inequities in Minnesota. This report also provides empirical evidence supporting specific policy interventions, investments, and advocacy efforts in key areas that are relevant to disparities present in the GE service area.

**Community Partner:** Great Expectations

**Team:** Anthony Bass (MPA 2021), Nicolas Demm (MPP 2021), Tenzing Jigme (MPA 2021), April Snyder (MPA 2021)

### **Technical Assistance for Continuous Living Cover Agricultural Practices**

This report explores opportunities to improve agricultural practices that improve soil health and retention while benefiting farmers, specifically by improving training for providers of technical assistance. Focused on technical assistance for agricultural practices known as continuous living cover (CLC), CLC is the idea that you always have something alive in the soil: not just mulch, and not just summer commodity crops, but living roots at all times. Research for this report includes a review of relevant literature and a survey conducted by Green Lands Blue Waters, but the primary source of this report's findings is a collection of interviews with 11 individuals connected in various ways to soil health technical assistance.

**Community Partner:** Green Lands Blue Waters

**Team:** Ashley Peters (MPA 2021), Edith Barrett (MPA 2022), Jack Stinogel (MURP 2021)