



Case Studies: Value of Transportation to Social Determinants of Health Destinations

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The National Center for Mobility Management (NCMM; nc4mm.org) is a national technical assistance center created to facilitate communities in adopting mobility management strategies. NCMM is funded through a cooperative agreement with the Federal Transit Administration (FTA) and is operated through a consortium of three national organizations – the American Public Transportation Association, the Community Transportation Association of America, and Easterseals, Inc. NCMM is charged with supporting FTA and its partners in carrying out the recommendations suggested in the updated [Coordinating Council on Access and Mobility \(CCAM\) Strategic Plan](#).

This information brief was prepared by NCMM staff who serve as Regional Liaisons to FTA Regions 1, 4, 5, and 7. This information is disseminated in the interest of information exchange. Neither the NCMM nor the FTA assumes liability for its content or use. The opinions and conclusions expressed herein are solely those of the authors and should not be construed as representing the opinions or policy of any agency of the federal government.

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Thank you.

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About this Information Brief

Easterseals, through its work at the National Center for Mobility Management (NCMM), focuses on building connections across education, human services, and transportation sectors so that individuals with disabilities can access school, work, health care, and other inclusive community settings. In this work, NCMM has researched, and sourced instances of current and discontinued case studies on value of transportation to Social Determinant of Health (SDOH) destinations the barriers to this practice in programs across all FTA regions. This guide will highlight a diverse range of examples and is intended to be utilized by organizations and agencies as a guide to influence programs in their regions.

For questions about this product, please contact [Judy Shanley](#), Ph.D. FTA Regions 1 & 5 Regional Liaison or [Enjoli Dixon](#), FTA Regions 4 & 7 Regional Liaison both from Easterseals.

Acknowledgments

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- *Easterseals*
- *River Cities Public Transit*
- *STARS (Saginaw Transit Authority Regional Services)*
- *St. Lawrence County Public Transit*
- *State of Kansas Mobility Managers*
- *Los Angeles County Aging & Disabilities Department*
- *Harvesters Food Bank*

Overview of Social Determinants of Health

The Centers for Disease Control and Prevention, in collaboration with the World Health Organization, defines social determinants of health (SDOH) as the nonmedical factors that affect health outcomes. These factors are related to an individual's environment, including their place of residence, birth, work, education level, employment, housing, age, and other external influences that shape their daily quality of life. Other barriers such as racism, political agendas, cultural bias, and economic systems can also play a significant role. The provided image focuses on various SDOH for different communities, but it does not include an important factor: transportation access.

Social Determinants of Health



Social Determinants of Health
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Healthy People 2030

Image provided by USDHHS

Program Listings

FTA Region	SDOH	Location	Agency/ Partner(s)	Description of programs	For more information
8	1. Health Care Access and Quality	Pierre, South Dakota	River Cities Public Transit	1. Veteran, 2. Medicaid 3. Youth	Ron Baumgart, Executive Director rbaumgart@rcptransit.com https://www.rcptransit.com/veterans/
5	1. Health Care Access and Quality 2. Education Access and Quality 3. Economic Stability	Saginaw, MI	STARS (Saginaw Transit Authority Regional Services)	1. Rides to Wellness – NEMT 2. Job Shuttles 3. University Transportation	Robert Sims, Mobility Coordinator rsimms@saginaw-stars.com https://saginaw-stars.com/
2	1. Health Care Access and Quality 2. Education Access and Quality	Canton, NY	St. Lawrence County Public Transit	1. College Connector 2. Volunteer Transit First Mile Last Mile Program 3. Farmers Market and Hot Meals	Sonja Jensen, Mobility Manager (315) 748-5463
7	1. Health Care Access and Quality 2. Neighborhood and Built Environment 3. Social and Community Context	Salina, KS	City of Salina/Salina Emergency Aid Food Bank/CityGo/Blue Cross and Blue Shield of Kansas (BCBSKS)/Live Well Salina	1. Accessible sidewalks 2. Pathway for biking 3. Additional bike racks 4. Additional parking	Michelle Coats, Director of Mobility Management for North Central Kansas (785)826-1583x315 Accessible Pathways to Food Bank
9	1. Health Care Access and Quality	Los Angeles, California	Los Angeles County	1. New Freedom Taxicab 2. NFT Critical Delivery Services (CDS) 3. NFT Emergency Food Box Delivery	David Kochen Human Services Administrator II dkochen@ad.lacounty.gov Los Angeles County – New Freedom Transportation Programs
7	1. Health Care Access and Quality 2. Neighborhood and Built Environment 3. Social and Community Context	Kansas City, MO	Harvesters Food Bank /Kansas City Transit Authority/University of Missouri – Kansas City Health Sciences District	1. Pop Up Pantries 2. Bus Stop Pop-Up Food Pantries	Jessica Kejr, Director of Programs and Food+ at Harvesters-The Community Food Network jkeir@harvesters.org https://www.harvesters.org Bus Stop Pop-Up Food Pantries UMKC Health Sciences District

II. Method and Response

NCMM developed a survey targeted at state Departments of Transportation, state agencies, and regional commissions/councils and community organizations to gather information about 1) transportation programs providing access to healthcare, work, school and other; and 2) [Coordinating Council on Access and Mobility \(CCAM\)](#) partners and examples of braided funding braided.. NCMM used a variety of outreach methods to obtain feedback, including reaching out to each state agencies and associations to complete and aid in distributing the survey. Response to the online survey was moderate, however, provided a wealth of information to help us evaluate and determine the following: language used in applications, mobility management education and resources, and activities in progress. NCMM gathered a geographically diverse set of respondents from both state agencies, planning organizations, transit associations and nonprofits.

Qualitative examples of how increasing people's access to transportation increases their access to vital SDOH destinations were collected. NCMM used the framework outlined below to capture information about the implementation of programs to help communities address SDOH. The conclusions described are based on interviews with state officials, mobility managers, transit agencies and reviews of related state resources and websites. These descriptions are intended to document the implementation phase of the state's mobility management network, regardless of where they are in the implementation phase, we believe that other states can learn from these examples.

- **FTA Region.** Identifies the region of the continental USA this program is located. This is helpful when an organization is coordinating transportation efforts across regional partners.
- **Agency or Organization/CCAM Partnerships.** The [Coordinating Council on Access and Mobility \(CCAM\)](#) has provided mobility management networks with the opportunity to develop new and innovative partnerships with non-transportation agencies and organizations, and can assess the range and purpose of these partnerships.
- **Program Description.** Describes the type of services and/or who the program benefited in the community.
- **Contact Information/Resources.** This provides the program contact information and further resources to gain information regarding the organizations administering the program. Please note that this information was current at the time this information brief was written. However, NCMM audiences

The following case studies highlight examples of how [Coordinating Council on Access and Mobility \(CCAM\)](#) partners can work together on a local, state, and regional level to limit the barriers or obstacles related to SDOH.

Case Studies

River Cities Public Transit, Pierre South Dakota

River Cities Public Transit, previously known as Community Coordinated Transportation Systems, was established in 1998 with the aim of coordinating transportation services among various providers. It originated from the collaboration between St Mary's Hospital, Capitol Area Counseling, and other agencies that provided their own transportation services. These founders laid the foundation for what would later become River Cities Public Transit, although they could not have anticipated the extent of coordination that exists today. The organization plays a crucial role in coordinating transportation for numerous agencies and businesses in the Pierre – Fort Pierre area. They are responsible for providing transportation services to healthcare facilities such as Golden Living Center, St Mary's Hospital, Maryhouse Nursing Home, Kelley Assisted Living Apartments, and Parkwood Assisted Living Center. As a Medicaid licensed transportation provider, River Cities Public Transit is authorized to assist medical centers in transporting their patients.

They also collaborate with clinics in the Pierre-Fort Pierre area, allowing patients to schedule their own rides or have clinics arrange transportation for them. In addition to healthcare services, River Cities Public Transit coordinates rides for various programs and institutions including Career One Stop, Right Turn, Growing Up Together, Missouri Shores Domestic Violence Center, Senior Meals Program, and the South Dakota Women's Prison.

Another program, which supports the future ridership of the system is the [Youth Transit](#) services. Parents or guardians may register their child each year for transportation services to various destinations after school each day. Children and their parents learn how to ride public transit, and the agency pays fares as they are transported to the following destinations daily; Boys and Girls Club, YMCA or extracurricular activities (band, choir, etc.).

River Cities Public Transit coordination efforts extend to smaller communities in Central South Dakota as well. For instance, they offer medical trips from Gettysburg to medical centers throughout the week and work closely with local commissions, councils, and senior centers in places like Blunt, Harrold, and Highmore to assess transportation needs and coordinate rides. River Cities Public Transit also operates a job shuttle from Highmore to the Pierre area on weekdays, ensuring individuals have reliable transportation to work. The organization firmly believes in the value of transportation coordination and actively practices it within the communities they serve.

STARS – Saginaw Transit Authority Regional Services, Saginaw, MI

STARS is a public transportation system in the Urbanized Saginaw Area. It covers around 1.5 million miles annually and serves over 3,300 people daily for various purposes such as work, doctor visits, shopping, and school. It plays a vital role in meeting basic transportation needs and contributing to economic development in the Saginaw Region. STARS offers mobility options to over 48,000 senior citizens and individuals with disabilities through the LIFT service, but not limited to just these populations.

Another program, the Rides to Wellness, a non-emergency medical program that serves the entire county. It is designed for passengers who are affiliated with partner agencies.

Individuals can access this service through STARS' community partner, Michigan Transportation Connection (MTC).

In addition to the providing medical services transportation, STARS provides a solution for those who need to access employment and education. STARS offers transportation services to Delta College students, allowing them to conveniently attend classes at both the Delta Main Campus and Downtown Saginaw Center. This program operates during the Fall and Winter Semester only. To ride for free, Delta students or employees need to present a valid ID to the driver. Aside from students, this transportation route is also available to the public for regular fare. Michigan Reconnect is a program that grants tuition-free access to community college for individuals aged 25 or older without college degrees. It enables them to pursue associate degrees or occupational certificates that are eligible for Pell grants.

Lastly, the Stars Job Shuttles, operated by STARS, offers specialized transportation services that cater to the specific needs of businesses. These job shuttles ensure that employees can commute to work reliably and on time, resulting in benefits such as reduced turnover, decreased training costs, access to a larger pool of potential employees, increased employee reliability, lower employee stress levels, and reduced transportation costs for employees. The job shuttles can be customized according to the requirements of the business and can be financed by the employer, employee, or a combination of both. They are not limited by county lines, operate 24/7, and can be serviced by either a single van or several large buses.

St. Lawrence County Public Transit, Canton, NY

St. Lawrence County Public Transit (embed link slcnypublictransit.com), which is operated by The Arc Jefferson – St. Lawrence, has achieved a huge milestone in 2023 by surpassing 100,000 rides. This exceeds the previous year's total ridership of 97,740. The public transit system in St. Lawrence County collaborated with the [Volunteer Transportation Center](#) and the County's First Mile Last Mile program, along with providing Mobility Management services. The St. Lawrence County Planning Office oversees these three programs. The increase in ridership is due to the updated routes and additional stops on routes 67, 68, and 71.

Currently, the County's bus system operates 19 routes, and most run on weekdays, except for Route #67, which runs daily and includes stops at SUNY Potsdam. There are also four routes that offer weekly or bi-weekly service. In 2018, the bus system provided a total of 50,922 one-way trips to riders. The number of riders varied each month, with the lowest ridership of 2,756 in February and the highest ridership of 6,882 in October. The buses traveled a total distance of 583,192 miles throughout the county. The increase in ridership and mileage during the second half of 2018 can be attributed to the addition of four new routes, the creation of the Ogdensburg shuttle, and the use of buses to transport The Arc clients, which were funded by Formula 5310 and NYS Office of Persons with Developmental Disabilities (OPWDD) monies. In Spring 2020, the Massena Shuttle Service was introduced to offer transportation to medical services, shopping areas, dining establishments, the library, the Department of Motor Vehicles, Akwesasne Mohawk Casino Resort, and more.

The St. Lawrence County Public Transit, operated by The Arc Jefferson - St. Lawrence, has a

variety of programs to support SDOH. For those in the community to access higher education opportunities, the "College Connector" route was introduced, which is available for both students and the public. This service allows easy travel between SUNY Canton, Clarkson University, and SUNY Potsdam campuses. The route connects the bus lines of each college through a central hub located at Walmart in Potsdam. The service operates seven days a week. Schedules can be accessed at each college, the St. Lawrence County Chamber of Commerce, and slcnypublictransit.com. Students can ride their college line for free using their student ID, while rides on other lines cost \$2. Public riders are charged the standard fee of \$2 per trip. The College Connector goal is to improve access to classes, campus events, and provide additional shopping and dining experiences. Public Transit provides free Wi-Fi service throughout the system.

In addition to the bus service, St. Lawrence County offers the "First Mile Last Mile" connector service. This service helps transport public transit riders to and from designated bus stops that are at least $\frac{3}{4}$ mile away from their locations. However, due to the limited number of designated stops and the large size of the county, some riders must make their own arrangements to reach the bus stops. To address this issue, the First Mile Last Mile program was introduced. It relies on volunteers who use their personal vehicles to transport bus riders. The Volunteer Transportation Center, Inc. coordinates the service by acting as the dispatcher and scheduling the rides in advance.

Between April and December 2018, the First Mile Last Mile program provided 885 one-way trips for transit riders, which accounted for 2% of the total number of bus trips in 2018. The volunteer drivers involved in the program traveled a total of 20,069 miles to transport transit riders to and from designated stops.

Another special program provided, per a partnership between the St. Lawrence County Office for the Aging and St. Lawrence County Public Transit was transportation to access local farmers markets exclusively for older adults. Seniors who are 60 years and older are cordially invited to partake in this exciting opportunity, which includes a complimentary round-trip ride and a delectable lunch at the farmers markets. The main objectives of these trips are to acquaint clients with our local public transit system, distribute NYS Farmers Market Coupons to income-eligible seniors, and actively contribute to the support of local farmers within our community. All those who wanted to participate were encouraged to sign up to ensure that they would receive a free bagged lunch. This is a wonderful chance for seniors to get outside to explore the farmers markets, connect with others, and enjoy fresh, local produce!

Accessible Pathways to Food Bank, Salina, KS

The Salina Emergency Aid Food Bank is receiving significant support from Pathways to a Healthy Kansas, backed by Blue Cross and Blue Shield of Kansas. This initiative has provided \$200,000 to enhance accessibility, including funding for new sidewalks linking the food bank to CityGo bus stops and improvements to parking facilities. These upgrades aim to address challenges faced by locals who walk or bike to the food bank, while also highlighting the community's commitment to inclusive access to essential services. Through collaborative efforts with Live Well Saline County, this transformative initiative reflects a broader commitment to improving health and well-being in the area.

New Freedom Transportation, Los Angeles, California

The [Los Angeles County Aging & Disabilities Department](#) received funding from the Los Angeles County Metropolitan Transportation Authority (METRO) to enhance transportation services throughout Los Angeles County. Their aim is to exceed the requirements outlined in the [Americans with Disabilities Act \(ADA\)](#) of 1990 and improve transportation options for older adults and individuals with disabilities.

The [New Freedom Transportation Program](#), managed by METRO, receives funding from the U.S Department of Transportation (DOT) Federal Transit Authority (FTA) and operates in compliance with all relevant federal, state, and local regulations.

Within New Freedom Transportation, clients can choose from three specialized programs; the [Taxicab](#), [Volunteer Driver](#) and [Door Assistance](#) program. The Volunteer Driver Mileage Reimbursement Program is available to eligible individuals monthly at no cost. While all services are accessible to the general public, eligibility criteria and service priorities have been implemented to ensure that assistance is provided primarily to those in the greatest need.

Those with the greatest need required special services during the pandemic. In response to the COVID-19 Pandemic, New Freedom Transportation swiftly addressed the needs of its aging and disability communities with new programming by establishing the Critical Delivery Services (CDS) Program. This initiative facilitated over 55,300 deliveries encompassing groceries, medication, household essentials, emergency food supplies, meals, and other vital necessities. Additionally, CDS offered urgent transportation services for medical appointments, voting, testing, and access to vaccination sites. The CDS initiative highlighted the substantial demand for delivery services among older adults and individuals with disabilities, shedding light on a previously unrecognized need prior to the pandemic.

Harvesters Food Bank (Bus Stop Pop-Up Food Pantries), Kansas City, MO

When discussing food insecurity, a common concern we often encounter is the lack of transportation to access pantries or food distribution centers. Harvesters is actively tackling this obstacle by experimenting with novel distribution approaches and utilizing a mapping tool to showcase available community food resources.

Harvester's transports food to various bus stops in the area. Through this innovative mobile food pantry model, individuals have full autonomy in selecting their food items, and the offerings are customized to meet the specific needs of bus commuters. As this initiative is still in its early stages, Harvesters is excited to continue expanding to additional locations.

To enhance support for community members dependent on public transit, the agency teamed up with the Kansas City Area Transit Authority, Lawrence Transit, and Topeka Metro. Together, they developed a mapping tool that showcases Harvester's partner agency food pantries conveniently located near bus stops in these metropolitan regions.

Harvesters is currently finalizing the development of this exciting new tool and will provide more information soon.

Conclusion

Social determinants of health (SDOH) place a large strain and influence on individuals' health, well-being, and overall quality of life. SDOH influences a wide range of factors, including the availability of safe housing, transportation, and safe and accessible neighborhoods. Community conditions such as Education, and job opportunities, income, access to nutritious foods, opportunities for physical activity, exposure to polluted air and water, and language and literacy skills all influence SDOH outcomes. Without addressing these areas, these determinants contribute to the consistent health disparities and inequities in society.

The case studies included in this report demonstrate successful programming in coordination with community partners that aim to solve mobility challenges as it relates to being SDOH in many communities. For example, individuals lacking access to grocery stores or farmers markets (like the seniors in St. Lawrence County in Canton, New York) with healthy options are more likely to have poor nutrition, which can increase their risk of developing conditions such as heart disease, diabetes, and obesity. This will most likely result in their life expectancy being lower compared to those who have access to healthy foods.

Therefore, because transportation has repeatedly been listed as the number one barrier, the focus of the Coordinating Council on Access and Mobility (CCAM) main goal is to develop relationships through coordinated transportation encouraging the collective efforts of multiple entities or agencies to enhance their ability to provide transportation services. This includes activities like sharing passenger trips and vehicles, sharing facilities, or services, collaborating on grant applications and training, and even braiding federal funds. The goal is to improve the availability, accessibility, and efficiency of transportation options, ultimately benefiting end users and serving a larger population and geographical area. Each of the case studies demonstrates interagency partnerships, whether at a local or state level that fosters innovation, leading to the development and implementation of future transportation models that provide improved customer service.

Resources

U.S. Department of Health and Human Services and Office of Disease Prevention and Health Promotion

- [Social Determinants of Health](#)

On October 27, 2022, the FTA convened the Coordinating Council on Access and Mobility (CCAM), a federal interagency council that coordinates funding and provides expertise on human services transportation for people with disabilities, older adults, and individuals of low income, and officially adopted

Coordinating Council on Access and Mobility (CCAM) Resources

- [CCAM Strategic Plan 2023-2026](#)

On October 27, 2022, the FTA convened the Coordinating Council on Access and Mobility (CCAM), a federal interagency council that coordinates funding and provides expertise on human services transportation for people with disabilities, older adults, and individuals of low income, and officially adopted the 2023-2026 CCAM Strategic Plan. The plan prioritizes expanding safe access to transit, providing affordable mobility options and sets a framework for collaboration among CCAM grantees at all levels and across jurisdictions.

- [CCAM Program Inventory](#)

The CCAM Program Inventory identifies 130 Federal programs that can provide funding for human services transportation for people with disabilities, older adults, and/or individuals of low income. In 2018 and 2019, CCAM agency representatives determined which programs to include via internal agency program validation efforts and the CCAM Program Analysis Working Sessions. The CCAM Program Inventory includes detailed program information, such as CFDA numbers, statutory references, types of recipients and beneficiaries, and eligible transportation activities. The CCAM Program Inventory Summary document, available in PDF and Excel formats, contains limited program details, and is formatted for easy printing.

- [CCAM Federal Fund Braiding Guide](#)

Federal fund braiding for local match allows grant recipients to use funds from one federal program to meet the match requirements of another. The CCAM Federal Fund Braiding Guide provides information to potential grantees as well as CCAM agency program managers on acceptable Federal fund braiding arrangements on transportation-related projects. The guide defines Federal fund braiding for local match and examines whether Federal fund braiding is allowable for 61 programs across CCAM agencies that may fund transportation.

- [CCAM Cost-Sharing Policy Statement](#)

The CCAM Cost-Sharing Policy Statement provides key transportation cost-sharing information to encourage greater State and local cost sharing. This includes information about vehicle and ride sharing as well as Federal fund braiding. Within the vehicle and ride sharing information, the CCAM Cost-Sharing Policy Statement includes 15 principles to guide State and local stakeholders' equitable allocation of shared costs, including two

principles specific to the provision of Medicaid non-emergency medical transportation (NEMT) and four specifics to the Veterans Health Administration's (VHA) Highly Rural Transportation Grants (HRTG) program, which provides NEMT for Veterans living in highly rural areas.

National Federal Technical Assistance Resource Centers

The following FTA-funded national technical assistance centers can provide free support and resources to help improve mobility options for individuals and communities.

[National Rural Transit Assistance Program \(RTAP\)](#) produces technical briefs and toolkits that support rural and tribal transportation programs.

www.nationalrtap.org | 888-589-6821 | info@nationalrtap.org

[National Center for Mobility Management \(NCMM\)](#) promotes customer-centered strategies to support mobility management networks to advance good health, economic vitality, self-sufficiency, and community.

www.nc4mm.org | 866-846-6400 | info@nc4mm.org

[National Aging and Disability Transportation Center \(NADTC\)](#), supports small urban and rural 5310 transportation providers to assist accessibility and enhanced mobility of older adults and people with disabilities.

www.nadtc.org | 866-983-3222 | contact@nadtc.org

[National Center for Applied Transit Technology \(N-CATT\)](#), provides support to programs to understand emerging technologies for states and local entities across the U.S.

www.n-catt.org | carpenter@ctaa.org

[Shared Use Mobility Center \(SUMC\)](#) is dedicated to achieving equitable, affordable, and environmentally sound mobility across the U.S., through the efficient use of transportation assets and policy or technical expertise.

www.sharedusemobilitycenter.org | info@sharedusemobilitycenter.org

[Transit Workforce Center \(TWC\)](#) is the Federal Transit Administration's first ever national technical assistance center for transit workforce development. Its mission is to help urban, suburban, tribal, and rural public transportation entities recruit, hire, train, and retain the diverse workforce needed now and in the future.

www.transitworkforce.org | twc@transportcenter.org

