

Contents

Contents						
List of	Tables	3				
List of Figures						
What is a One-Call/One-Click System?						
Who is	the transportation disadvantaged?	5				
Execut	ive Summary	6				
Abbrev	viations & Important Concepts	. 13				
1.0	Introduction	. 14				
1.1	Overview of Case Studies	. 15				
1.2	Communities Served and System Coverage	.20				
1.3	System Functionality	. 21				
1.4	Transportation System Characteristics	.26				
2.0	Rides Served and Cost Per Ride	. 28				
3.0	Key Findings from Seven In-Depth Cases	.32				
3.1	Institutional Structure	.35				
3.2	Funding	.36				
3.3	Target Populations	.38				
3.4	Software and Technology	.39				
3.5	Coordinated Human Services Transportation Plans	42				
3.6	Challenges for Community Based Transportation	45				
3.7	Opportunities for Community Based Transportation	46				
4.0	Key Lessons for San Antonio	.47				
4.1	Learnings from the One-Call One-Click Kickoff Event	.47				
4.2	An Overview of Lessons from the Case Studies	.48				
Refere	nces	.51				
Appen	dix A: Case Study Profiles	.52				
Appendix R: Funding Ontions for Mobility Management						

List of Tables

Table 1. List Of 21 Cases By Host Agency And Jurisdiction Served	16
Table 2. Assessment of 21 Programs based on the NCHRP Framework of System Functionality	23
Table 3. Level Of Mobility And Examples From Case Studies	38
Table 4. Summary of HST plan coding	44
Table 5. Status Of Funding Sustainability In The Inventory	45

List of Figures

Figure 1. National Inventory Of 21 One Call One Click Systems	7
Figure 2. Transportation Disadvantaged In San Antonio And Bexar County	16
Figure 3. Distribution of cases by jurisdiction and legal status of host agency	18
Figure 4. Types Of Customer Interface And Distribution Of Trip Mode	19
Figure 5. Level of System Functionality	24
Figure 6 The Hopelink "Find a Ride" Interface	25
Figure 7. Rides Met by the System AS A Proportion of Rides Needed	28
Figure 8. Cost Per Ride for the Hosting Entity	29
Figure 9. Cost Per Ride Vs Rides Per 10,000	30
Figure 10 Types of Institutional Arrangements	35
Figure 11. Types of operations funding	36
Figure 12. Trip Cycle Supported By Standardizing Data Specifications Across Providers (Source: A	ARP) .39
Figure 13. 6 Key Lessons For San Antonio	47

What is a One-Call/One-Click System?

Finding travel information for specialized transportation services can be challenging. To help with this, different regions and counties have created systems and services that guide travelers. These services are called "linkages" (NCHRP Report 832), and they match trip options and programs with specific trip characteristics to make travel easier for those who need it.



Linkages can refer to various transportation options, such as public transit, carpooling programs, taxis, ride-hailing apps like Uber and Lyft, dial-a-ride services, and private chair car services. In the past, transportation resource guides containing contact phone numbers were used to share this comprehensive information for these service options. Most of this service information is now available through online platforms or automated calling services. Local and regional governments and nonprofit organizations utilize online platforms or calling centers to consolidate service options and streamline the search process using "One Call/One Click" (1C1C) systems. 1C1C simplifies the process of understanding local transportation options and finding suitable resources based on travelers' specific needs, including eligibility, timing, and location preferences. With these 1C1C systems, users can obtain information on available transportation options through a website or by speaking with a mobility expert over the phone. The primary goal of a 1C1C system is to seamlessly connect travelers with the resources they need, enhancing accessibility and mobility.

Who is the transportation disadvantaged?



Different communities around the country have slightly varying definitions of transportation disadvantage. Typically, lower-income individuals above the age of 65 and persons with disabilities are part of the "Transportation Disadvantaged" groups (Loukaitou-Sideris et al., 2019). However, there can be more expansive definitions. For instance, persons who have language barriers and unable to speak in English are also considered Transportation Disadvantaged based on the Atlanta Human Services and Transportation plan.

The Request for Proposal (RFP) from Ride Connect of Texas (RCT) and the San Antonio Area Foundation notes that their population of interest is, "older adults (defined as individuals aged 60 and older) and persons with disabilities..." (Refer Page 3, RCT RFP). We find that scholars indicate the thresholds for defining older adults may be problematic given the propensity for historical marginalization and persistent poverty to exacerbate age related health problems in persons of lower age and leading to early driving cessation (Hess & Russell, 2012; Ozbilen et al., 2022). Therefore, many research papers consider people above the age of 55 or persons below 1.5 times the federal poverty level as part of the transportation disadvantaged groups. Because there is variation between the RFP population of interest and scholarly definitions of transportation disadvantaged groups, we defined transportation disadvantaged as people above the age of 65 below the poverty line and people of any age with disabilities below the poverty line.

Transportation Disadvantage



People above the age of 65 below the federal poverty line



People with disabilities below the federal poverty line

Using this definition to identify TD populations allows for a comparison across jurisdictions using the American Community Survey of 2022. ACS provides readily available tables of people by age, poverty status, and disability status. Based on existing literature, we anticipate that people within these categories have limitations due to age, disability, or reduced financial resources that exacerbate their mobility barriers and increase their need for subsidized and on-demand transportation. We acknowledge this is a more conservative estimate of transportation disadvantages in urban regions.

Executive Summary

What is the focus of this report?

In this report, we begin to understand how different communities nationwide strategize for, plan for, and implement One-Call One-Click systems. It provides us with a preliminary understanding of the nature and complexity of the value chain of integrated transportation, what are its various component parts, how communities innovate and overcome challenges, and who participates and who does not, and so on. Interviews with 1C1C systems provide deeper insights into some early considerations for San Antonio, which will be made more evident as this project progresses. This report does not, however, have conclusive answers for how San Antonio should plan its system or provide an opinion on what systems are more successful than others.

Background

In collaboration with its SALSA affiliates, Ride Connect Texas has retained the Department of Public Administration at the University of North Texas at Denton to evaluate institutional readiness in setting up an advanced mobility management system serving transportation disadvantaged in San Antonio and Bexar County. Conceptualized as a 1C1C platform, the system's key features will include provision for both door-to-door and through-door assistance. The clients' envisioned system will also provide an elevated level of service with trained drivers, same-day travel requests, integration of scheduling and payment, and much more. As a first step, the research team, comprising researchers from the University of North Texas and, through a sub-award, the University of Massachusetts Boston, analyzed a series of case studies across the nation to evaluate transportation system characteristics and the successes and challenges the systems have encountered over the years since their establishment. This research encompassed a broad range of topical areas, including:

- Ridership per population served, system coverage, and access.
- System functionality and incrementality, encompassing information and referral, trip booking, and payment, as well as the sequencing of system implementation timeline.
- Benchmarking the existing infrastructure and institutional capacity by evaluating accessibility standards for each system component, the number of centers, staff capacity, software access, and office capacity.
- The steps taken to ensure system readiness at the outset and throughout the service's lifecycle, including coordination with service providers, participation, and training, as well as community and stakeholder outreach.
- An assessment of project costs, which included both initial and ongoing expenditures, along with a detailed breakdown of these costs.

This report's findings provide a standard for assessing the readiness of San Antonio and Bexar County to implement an advanced mobility management system for transportation disadvantaged. The 1C1C system for San Antonio would offer users the ability to request, arrange, and pay for transportation via a website or call center.

Data and Methods

We identified 21 1C1C systems nationwide from three primary sources:

- the National Center for Mobility Management (NCMM) online repository of 1C1C systems,
- the National Cooperative Highway Research Program's (NCHRP) 2016 report on specialized transportation coordination, and
- the Veteran's Transportation Community Living Initiative grants funding lists.

Then, we sourced qualitative publicly available data for the 21 systems from their websites, reports, business plans, and budgets to create descriptions of their functionality, user eligibility, organizational structure, technology, funding, and service metrics. We observed considerable variation in the functionality of web-based 1C1C systems and the transportation options offered. Therefore, we conducted semi-structured interviews with seven of the 21 systems, which resulted in a wealth of qualitative data on administrative challenges and future opportunities for 1C1C systems.

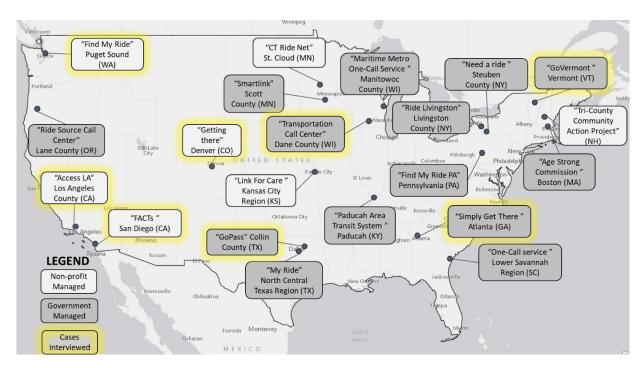


FIGURE 1. NATIONAL INVENTORY OF 21 ONE CALL ONE CLICK SYSTEMS

An Overview of Findings from the Twenty-One Cases

Legal Status of Host Entity and System Coverage -

- 15 1C1C systems are government led
- 6 1C1C systems are nonprofit led
- 4 types of jurisdictions
 - o 9 single counties only

- 5 groups of counties
- o 5 metro regions
- o 2 statewide

None of the systems in our case list served parts of counties or rural areas alone.

System Functionality - The intent of 1C1C systems is to provide access to information and consequently enable access to services. However, there is considerable variation in functionality, including website vs call centers, types of populations served, eligibility requirements and processes, booking and payment capabilities, types of vehicles and drivers, and types of services such as information only, information and rides, and types of rides offered. An important distinction is that none of these systems work through expansive integration of all the available mode choices for transportation disadvantaged populations. For instance, if a client needed a trip that required them to commute using a combination of paratransit and a local volunteer led service, no single system we studied allows for such integration. The availability of web-based systems does not automatically guarantee high quality and error free information on community-based transportation options for transportation disadvantaged populations.

Proportion of Rides Served versus Cost Per Ride – A detailed description of the methodology used to estimate travel needs of transportation disadvantaged and a normalized measure of cost per ride can be found in chapter 2. We can estimate the cost per ride and number of rides served for 12 of the 21 systems.

We found that most of the systems serve a very small portion of transportation disadvantaged populations' needs in their jurisdictions. Costs also vary. Paratransit systems with full functionality—from trip information to booking and payment—average around \$18 per trip, serving approximately 130 rides out of every 10,000 needed. In contrast, systems with full functionality operating their fleet have an average cost of \$40 per trip, covering around 380 out of 10,000 needed rides.

What are the different types of rides currently served?

Most of the agencies providing on-demand transportation primarily serve clients requiring non-emergency medical transportation. None of the 1C1C systems we examined serve as the state-designated Non-Emergency Medical Transportation (NEMT) contractor. However, six of the agencies have arrangements in place to be reimbursed for Medicare and Medicaid eligible rides.

Who and what types of rides are not served?

Typically, only a very small portion of non-medical rides are served by on-demand transportation, implying that people who need rides for social visits may be severely underserved. System administrators indicated that most of their riders did not require special mobility accommodations. All the on-demand systems serve clients door to door. None of the cases included in this study provided transportation for lower-mobility clients. Based on the language in RCT's Request for Proposal, the 1C1C systems did not serve clients who needed "door-through-door" services.

Findings from Seven In-Depth Cases:

We conducted an in-depth analysis of 7 systems – Hopelink (WA), Atlanta Regional Commission (GA), FACTS San Diego (CA), Access Services LA (CA), Vermont DOT, Dane County (WI), and City of McKinney/Collin County (TX). The following are the most important findings.

<u>Funding</u>

Funding for 1C1C systems has followed different phases in the infrastructure implementation.

Initiation Phase: The FTA's Veterans Transportation and Community Living Initiative (VTCLI) innovation funding provided in two rounds in 2011 and 2012 played a pivotal role in the initial development of most systems.

Operations Expenditure: The Enhanced Mobility of Seniors and Individuals with Disabilities program (5310) allocations support ongoing 1C1C system operations. This is provided as formula funds with a local match. The only exception is Collin County transit implemented by the city of McKinney, Collin County that uses FTA 5307 funds intended for urban transportation and does not use 5310 funds.

Innovation and Upgrades: The ongoing Accelerating Innovative Mobility (AIM) grant has provided jurisdictions with funds needed to upgrade their technology.

Funding for host organizations is uncertain and varies. System administrators report high levels of precarity in managing expenses and technology interfaces in the long term. An overview of funding findings is presented below:

- State and local designations help access funding 1C1C systems can access local funding by serving as the designated paratransit provider or as the Consolidated Transportation Service Agency (Access Services LA and FACTS San Diego).
- Intergovernmental support can lead to sustainable operations Cooperation across local, regional, and state governments can help secure and stabilize funding (Vermont DOT and Collin County).
- Local political priorities change Having a local champion for a 1C1C system is critical for establishing local support and funding, positively contributing to the system's sustainability (Atlanta Regional Commission).

Reliance on competitive funding alone leaves systems underfunded – Reliance of competitive funding, such as FTA 5310, can limit opportunities for other funding and leave the system underfunded (Hopelink) and with significantly reduced services (Dane County).

Infrastructure and Human Resource Allocation

Systems demonstrate diverse arrangements for managing their human resource needs. These 1C1C systems include call center infrastructure, mobility managers, and sometimes a technology manager. Those with up-to-date and real-time information tracking systems have additional technology assistance. Most of the systems have lean teams of two to four full-time staff while Access Services LA has 75 staff members to manage operations.

Call center vs Website - Call centers remain the dominant method for transportation information and referrals, even in systems with efficient websites. Clients prefer to talk with mobility managers to plan and book trips during regular business hours. FACTs San Diego contracts with another organization for call center support during non-business hours with excess demand. Hopelink and City of McKinney, Collin County's SPARE Labs prefer clients to use the app or website and use Integrated Voice Recognition for canceling trips or for getting up-to-date ride provider information.

Mobility management – Mobility management, including travel training and detailed trip support, enables 1C1C systems to access 5310 funding. Mobility managers in Access Services LA are trained to understand clients' specific needs and suggest alternative options like a city level dial-a-ride system. Ineligible clients are usually provided with at least a referral for an outside service provider in all the seven systems.

Vehicles and dispatch – Access Services LA owns a substantial fleet and contracts with other providers. The other six systems have smaller fleets of 2-4 vehicles and rely primarily on contractual arrangements with other providers. COVID-19 impacted on-demand transportation arrangements. Cab companies in Dane County closed due to economic uncertainty, impacting the available fleet of ADA-compliant Wheelchair Accessible Vehicles (WAV). Dane County and Hopelink have not recovered from the disruption of the volunteer driver operations. Access Services LA is considering contracting with Uber and Lyft to overcome fleet shortages post-pandemic.

Software and technology challenges

211 integration - None of the systems have 211 integrations although Hopelink and FACTs administrators acknowledge that the integration could be immensely useful.

Open-source or proprietary software - Transportation systems have different approaches to data management and technology. Open-source software like GTFS Flex can be implemented with little cost, but smaller providers may struggle with complex data management. HIPAA compliance may also be an issue for healthcare-related transportation services that use open-source technology.

Agencies can outsource data management to external firms for more efficient data upkeep. Some examples are McKinney's DART RUN and Go Vermont. Dane County relies on proprietary software created a decade ago, which can be expensive to upgrade. San Diego uses Ecolane, a software that supports brokerage systems for managing ride requests and scheduling.

Standardizing data specifications – Data standardization is necessary for seamless operations for clients, whether San Antonio adopts open-source or proprietary software. Standardization will require effort and cost for service providers participating in the 1C1C system.

Important Takeaways on Technology - Decisions on software and data management depend on factors like funding, local relationships, and access to skilled personnel. Dependence on a single technology provider carries risks, which can be mitigated by diversifying providers or solutions. A thorough risk assessment is essential to manage tech risks effectively.

DART MOBILITY SERVICE-CITY OF MCKINNEY, COLLIN COUNTY TRANSIT



The City of McKinney, TX uses the DART RUN Program with the Go Pass mobile app. The app costs \$200,000 for a 3-year license and offers real-time booking, departure and arrival time selections, and mobility needs selections. DART Run covers Celina, Lowry Crossing, McKinney, Melissa, Princeton, and Prosper but does not extend outside the county boundaries.

TECH: SPARE Labs uses the "SPARE Platform" to improve call center operations and IVR automation, working with ride-sharing services like Lyft and Uber through NTI software to boost efficiency.

CURRENT STATUS: The app and website are funded by McKinney Urban Transit District. DART partners with SPARE Labs for wider services. Go Pass App can be used for bookings and payments. Call center operates on specific hours.

EXPANSION PLANS: DART Run plans to expand its Go Pass App license to include Frisco and smaller communities in the Urbanized Area (UZA) over the next three years, but this expansion poses funding complexities due to multiple jurisdictions with distinct priorities.

Five Key Recommendations for San Antonio:

- Engage Multiple Levels of Government and Stakeholders: San Antonio's 1C1C system should involve various levels of government, key stakeholders, and diverse transportation services. State agencies can manage information infrastructure, while local governments handle public transportation and paratransit. Local contractors, including non-profits and private trip providers, should collaborate under a brokerage agreement.
- 2. **Prioritize Reliable Access:** Ensuring reliable access to transportation services is paramount. San Antonio's 1C1C system should prioritize contracted services or direct ownership of vehicles and staff drivers to guarantee dependable transportation access for all residents.
- 3. **Prioritize Centralized Information Management:** San Antonio should focus on centralized information management as a critical component of its 1C1C system. This approach streamlines coordination, matches resources efficiently, reduces costs, decreases wait times, and enhances accessibility for transportation-disadvantaged populations.
- 4. **Secure Dedicated Funding Streams:** Government agencies in San Antonio should establish dedicated funding streams to ensure the sustainability and success of the 1C1C system. Adequate funding is essential for maintaining and expanding essential services.
- 5. **Advocate for State-Level Policy Support:** Advocacy for state-level policies that support the needs of transportation-disadvantaged populations is crucial. Nonprofits and similar

organizations in San Antonio should play a vital role in promoting and shaping these policies to provide a regulatory framework and facilitate coordination among stakeholders.

Abbreviations & Important Concepts

1C1C—One-Call/One-Click

ACS—American Community Survey

ADA - Americans with Disabilities Act

ARC - Atlanta Regional Commission

BEA—United States Bureau of Economic Analysis

BLS—United States Bureau of Labor Statistics

CTSA— Consolidated Transportation Services Agency

DART – Dallas Area Rapid Transit

FTA—Federal Transportation Administration

GTFS—General Transit Feed Specification

HST—Human Services Transportation

HUD—United States Housing and Urban Development

IVR – Integrated Voice Response

MoU—Memoranda of Understanding

MSA—Metropolitan Statistical Area

NCHRP—National Cooperative Highway Research Program

NCTCOG - North Central Texas Council of Governments

NEMT—Non-Emergency Medical Transportation

RPP—Regional Price Parities

RTP—Regional Transportation Plan

SALSA—Successfully Aging and Living in San Antonio

TNC – Transportation Network Companies (such as Uber and Lyft)

Transportation disadvantaged—older adults and people with disabilities below the federal poverty line

VA—Department of Veterans Affairs

VTCLI—Veterans Transportation and Community Living Initiative

WAV - Wheelchair Accessible Vehicle

1.0 Introduction

Ride Connect Texas, in partnership with its SALSA affiliates, has engaged the University of North Texas at Denton's Department of Public Administration to assess the feasibility of establishing an advanced mobility management system in San Antonio and Bexar County. This system, intended primarily for transportation disadvantaged, is envisioned as a "One Call/One Click" platform. It aims to offer comprehensive services, including door-to-door and through-door assistance, trained drivers, same-day travel arrangements, and integrated scheduling and payment options for transportation disadvantaged.

The research team, including experts from the University of North Texas and the University of Massachusetts Boston (through a sub-award), has conducted a nationwide analysis of similar systems. The study focuses on understanding the characteristics, successes, and challenges of these transportation systems since their inception.

This report provides an in-depth assessment of one-call, one-click transportation systems across the United States, based on extensive case studies. The primary objectives are to analyze each system's structure and coordination among various agencies and to explore their implementation strategies, including cost, vendor management, resource mobilization, and sustainability.

Key components of the study include:

- 1. Development of 21 case studies using secondary data, reports, websites, local Human Services and Transportation plans, and budget documents of organizations managing these systems.
- In-depth interviews and email exchanges with administrators of seven of the 21 case studies for additional insights into system management and external factors affecting local on-demand transportation.

The study reveals a wide variety in the systems' scope, coordination levels, funding access, service reliability, and other features. The COVID-19 pandemic has significantly impacted these systems, particularly those dependent on volunteer drivers, with varying degrees of recovery success.

The report consists of five main sections:

- 1. An overview and key characteristics of the 21 case studies.
- 2. Detailed insights from the seven case studies with conducted interviews.
- 3. Discussion of major challenges and opportunities for on-demand transportation systems, especially those serving transportation disadvantaged populations.
- 4. Preliminary recommendations for San Antonio's project.
- 5. An appendix containing briefs of each case study and information on federal funding sources, including known programs like the 5310 funding and others aimed at innovation.

The insights and funding options from this report will inform future strategies for the San Antonio 1C1C Transportation System Planning project.

1.1 Overview of Case Studies

Two critical programs have funded the strategic effort to consolidate and connect users to various transportation services and programs nationwide through 1C1C systems. About 80% comes from the Federal Transit Administration (FTA) through programs 5307, 5310, and 5311. Additionally, the Veterans Transportation and Community Living Initiative (VTCLI), another vital funding avenue, is a collaboration between the FTA and the Department of Veterans Affairs (VA). While the VTCLI was initially envisioned to link veterans with transportation services, it has since expanded its scope. It now connects a diverse range of users, encompassing those dependent on specialized transportation, to a plethora of options like public transit, paratransit, ridesharing, community transport, human transportation services, and private entities such as taxis and ride-hailing transportation network companies (TNC) like Uber and Lyft. Notably, in 2011 and 2012, 118 VTCLI grants were distributed, totaling \$64 million. These grants significantly accelerated the creation and rollout of numerous 1C1C systems at state, regional, and county levels. VTCLI funding did not continue past the 2012 distribution. Other funding sources and programs have since been formulated to expand upon various aspects of mobility on-demand transportation services and have helped fund technology innovation and software development.

The mature 1C1C systems in this report offer valuable insights and lessons learned over their years of operation. By studying their successes and challenges, transportation agencies and policymakers can identify best practices and areas for improvement in the design and implementation of such systems. This knowledge can inform the development of more effective and efficient transportation solutions for the future. Long-term operation of these systems demonstrates their sustainability and adaptability.

Case study locations for this research were identified using the One-Call/One-Click Resource Center - National Center for Mobility Management, the Veterans Transportation and Community Living Initiative (VTCLI) | FTA (dot.gov) 2011 and 2012 grant recipients list, and the Mobility Services for All Americans Deployment Planning Projects | FTA (dot.gov) grant recipients list. For the evaluation structure and indepth analysis, we followed the frameworks provided by the NCHRP Report 832 titled, "State DOTs Connecting Specialized Transportation Users and Rides Volume 1: Research Report (2016) & Volume 2: Toolkit." We also added to the structure to examine different facets of information management and coordination. The research team will continue to review and analyze other systems and include them in a compendium of case study briefs.

Refer to Appendix C for detailed information about the various funds, eligibility criteria, and funds allocated.

The Figure 1 map presented in the executive summary shows the final list of 21 systems included in this research. In addition to conducting an overview of the systems in the inventory, we conducted administrator interviews and in-depth studies of seven systems, including — City of McKinney, Collin County, TX, Access Services LA in LA County, CA, FACTs San Diego, CA, Hopelink in Puget Sound, WA, Dane County, WI, Go Vermont VT, and Simply Get There Atlanta, GA. Many VTCLI-funded projects have evolved to become part of larger multi-modal transit systems with few if any, specialized service options for transportation disadvantaged, if the system did not address the specialized needs of the target groups, we excluded them from the study.

Transportation Disadvantage in San Antonio and Bexar County

The figures below show the population of older adults and people with disabilities with incomes below the federal poverty line (*Data Source: ACS 2022*).



FIGURE 2. TRANSPORTATION DISADVANTAGED IN SAN ANTONIO AND BEXAR COUNTY

The following is a detailed list of cases, their host agencies, the jurisdiction they serve and the total Transportation Disadvantaged populations in the jurisdictions. The TD population is the total number of adults over the age of 65 below the federal poverty line and any persons with a disability below the federal poverty line. The image above shows the transportation disadvantaged in the San Antonio region for comparison.

TABLE 1. LIST OF 21 CASES BY HOST AGENCY AND JURISDICTION SERVED

Jurisdiction name	State	Name of System	Name of managing entity	Government (G) or non- government (N)	County (C), Group of Counties (GC), (MSA), State (S)	Total TD population
Atlanta	GA	Simply Get There	Atlanta Regional Commission	G	MSA	144,020
Boston	MA	Age Strong Commission	City of Boston	G	MSA	134,777
Collin County	TX	Collin County Transit One Call One Click	Dallas Area Rapid Transit (DART) Mobility Service	G	С	12,786
Dane County	WI	Transportatio n Call Center	Dane County	G	С	9,819
Denver	СО	Getting there	Denver Regional Mobility and Access Council	G	MSA	56,274
Kansas City region	KS	Link For Care	Landon Center on Aging	N	MSA	54,415
Lane County	OR	Ride Source Call Center ADA Paratransit and Trip Planner)	Lane Transit District	G	С	18,994

Jurisdiction name	State	Name of System	Name of managing entity	Government (G) or non- government (N)	County (C), Group of Counties (GC), (MSA), State (S)	Total TD population
Livingston county	NY	Ride Livingston	Livingston county	G	С	1,603
Los Angeles County	CA	Access LA	Access Service Inc.	N	С	309,208
Lower Savannah region	SC	One-Call service	Lower Savannah Council of Governments	G	GC	14,546
Manitowoc County	WI	Maritime Metro Transit One-Call Service	County and city of Manitowoc	G	С	2,424
North Central Texas Region	TX	My Ride North Texas	North Central Texas	G	GC	165,032
Paducah	KY	Paducah Area Transit System	Paducah Area Transit System	G	MSA	4,536
Pennsylvan ia	PA	Find my Ride PA	Pennsylvania Dept of Transportation	G	S	472,081
Puget Sound	WA	Find My Ride	Hopelink	N	GC	6,364
San Diego	CA	FACTs	FACTs San Diego	N	С	73,229
Scott County	MN	Smartlink	Scott County	G	С	1,332
St. Cloud	MN	CT Ride Net	Care Transportation Inc	N	GC	90,057
Steuben County	NY	Need a ride	Steuben County	G	С	3,859
Tri-County region	NH	Tri-County Community Action Project	Tri-County Community Action Project	N	GC	9,205
Vermont	VT	Go Vermont	Vermont Agency of Transportation	G	S	22,798

A few essential characteristics of the systems we studied are as follows:

- All systems have specialized services for transportation disadvantaged in the local communities and rely on multiple transportation options, from paratransit to private rides. There are five systems hosted by municipal transit also operating public transit options for the broader community. Many of these systems include additional specialized programs and subsidies for transportation disadvantaged. The online trip matching systems hosted by Livingston, FACTs, Hopelink, Go Vermont, My Ride North Central Texas, Simplygetthere Atlanta, and Stueben County Need a Ride are available for use by the public.
- The legal status and level of government determine system offerings, efficiency, reliability, local buyin, and functioning of on-demand transportation systems. In the 21 systems included, 15 are
 managed and hosted by government agencies, and the rest are non-profit organizations.
 Government systems tend to focus on paratransit, while nonprofit-hosted systems focus on
 information and referral and brokered rides. Access Services, a nonprofit, provides only paratransit
 service for LA County.

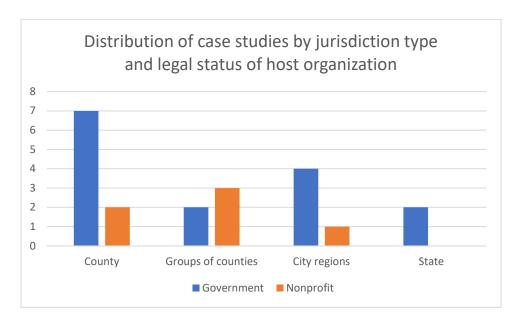


FIGURE 3. DISTRIBUTION OF CASES BY JURISDICTION AND LEGAL STATUS OF HOST AGENCY

- Most systems offer transportation through combinations of paratransit, volunteer drivers, contract services, and own fleet of vehicles. Six systems do not offer rides and only provide trip information or trip referrals.
- None of the ride services provide door-through-door services for extremely low-mobility clients. Volunteer-led services have also significantly diminished after the pandemic. Only four systems we learned currently use volunteers, and only one relies entirely on volunteer drivers for trip provision.

• Call centers are the most prevalent mechanism for providing transportation information and referrals. Seven systems use combinations of call centers and websites to provide information or referrals based on trip origin and destination. Most of these systems operate in extremely lean teams of 2 to 6 people.



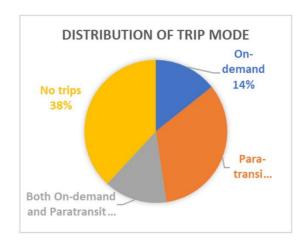


FIGURE 4. Types Of Customer Interface And Distribution Of Trip Mode

- Most systems (15) have either dedicated or partial sources of consistent funding from state and federal sources. The systems with reliable sources of full funding are more likely to be managed by the county or state governments. Two notable exceptions are Access LA and the Tri-County Community Action Project NH managed by non-profit organizations.
- None of the systems were designated NEMT for the state but 6 systems received Medicaid reimbursement for eligible trips. Whether or not a system includes Non-Emergency Medical Transportation (NEMT) services is an essential determinant of sustained funding. Only five of the systems include NEMT rides.
- Most of the systems use the integration of GTFS and GTFS Flex feeds to operate and manage data on trips and dispatch information. The front-end interface is often customized using a local vendor.
 Updating and verifying the data is often challenging and expensive. Centralized client management is unusual except in state-level systems. The responsibility of data management lies with the host agency requiring additional staff support.

How many of these cases are comparable to San Antonio and Bexar County?

Would we have gotten more comparable ideas of challenges and solutions if we had picked cities that were like San Antonio in terms of its population, socio-economic make up, its geographic size, or urban characteristics?

This is an important question and could have been one of the strategies in selecting case studies. However, the research team chose a diverse sample of cases. Our assessment is that on-demand transportation for transportation disadvantaged populations is a segment that is severely underserviced and underfunded across the country. The relative disparities across diverse cities and regions could be like San Antonio while offering a more diverse account of innovations in service provision, fund raising, institutional collaborations, and innovative technology solutions. In contrast, cases from a single type of city region would have had little research value since it would have presented problems and challenges like that of San Antonio, while offering fewer opportunities for learning from the range of solutions possible.

- For example, studying the Vermont system shows what is possible if the state DOT were to cooperate. This could provide directions for policy advocacy for the San Antonio coalition.
- The FACTs San Diego case shows how to build a strong brokerage model when local service providers are not interested in a high level of data sharing or collaboration.
- The Atlanta system demonstrates how technology innovations can bring together a wide range of service providers for seamless travel planning for clients.

We believe that effectively serving the transportation disadvantaged in San Antonio will require converging multiple ideas and innovations tried and testing in these diverse cases. No single idea or strategy will provide the solution we seek.

1.2 Communities Served and System Coverage

The primary, yet often unspoken, goal of One-Call One-Click (1C1C) systems is to serve populations with special needs, particularly the transportation disadvantaged. Some of the systems (n=5) are integrated into municipal transit systems, expanding the range of public transit options available to the user, including the utilization of paratransit infrastructure notably those run by local or regional governments with paratransit as a primary service. This approach allows for the possibility of integrating and cross subsidizing these services within broader transportation systems. However, adequately serving those with lower mobility remains a complex task.

These systems typically offer three types of services based on customer mobility needs: curb-to-curb, door-to-door, and door-through-door. Understanding the various eligibility criteria for these specialized services is crucial. These criteria, which include in-person interviews, mail-in applications, physician approvals, and comprehensive screening tests, directly affect accessibility for transportation

disadvantaged and those with low mobility. Agencies set these standards to meet Americans with Disabilities Act requirements and manage limited resources effectively, ensuring services reach those in genuine need. We find that the criteria for eligibility determination vary among agencies: 3 systems require in person interviews, 3 systems require mail in applications, and one offers a website application. Of these systems, three require physician's approval and 1 system has additional extensive screening process to confirm eligibility.

Assessing the effectiveness of 1C1C systems is challenging because of an imbalance between the demand and supply of rides for transportation disadvantaged for several reasons:

- Incomplete coverage and exclusion of certain service providers limit accessibility and reduce the supply of rides for transportation-disadvantaged individuals.
- Evolving customer demographics and changing needs add complexity to demand assessment.
- Operational and funding constraints, such as ride limitations and limited real-time services, impact user satisfaction and system flexibility.
- Real-time services are being attempted by entities like City of McKinney, Collin County, FACTs San Diego, and Access Services to address these challenges.

The absence of comprehensive coverage limits the accessibility of transportation-disadvantaged individuals to a range of service providers and transportation modes. This can hinder their ability to find suitable transportation solutions that meet their specific needs, leading to a reduced supply of rides. Operational constraints, such as limitations on the number of rides per individual, can restrict the flexibility and availability of transportation services for users. This can be problematic because it may not adequately meet the diverse and evolving transportation needs of individuals, especially those with disabilities or other mobility challenges. The limited accommodation of real-time requests within 1C1C systems can hinder the system's responsiveness to immediate transportation needs. Those attempting real time services include City of McKinney in Collin County, FACTs San Diego and Access Services.

1.3 System Functionality

The NCHRP refers to systems that serve the specialized transportation needs of communities, matching trip options with trip needs as "linkages." Linkages that serve to connect specialized transportation users and their rides can represent a range from static information to highly sophisticated trip booking and payment integration.

The NCHRP report found that the linkage systems took one of three routes – integration with 211 or 511 systems, integration with or working around proprietary paratransit scheduling software for their ability to book trips or built from scratch. 211 integrations would have been the obvious choice since 211 operators, with their specialized training and vast experience in linking callers to diverse services, can offer enhanced information of trip providers and options. However, of the systems we studied, 16 systems are built from scratch, none are integrated with 211 or 511, and 5 are integrated with paratransit.

In pushing out trip provider information, the NHCRP report notes that:

- Operating phone-based linkage services requires significant financial resources, limiting accessibility for many agencies and organizations.
- Some entities have opted for cost-effective online portals using the "triage question" approach, where users are guided through a series of questions to determine their transportation needs.
- The portal then shortlists transportation providers based on user responses, similar to how mobility management experts operate. Based on user responses, the portal shortlists the transportation providers most aligned with the user's requirements.

Our study finds that four systems use static information portals, and one has dynamic provider updated information. Of these cases, 16 include matching assistance to provide more specific transportation service information to the client.

One Call/One Click programs offering trip planning assistance enhance the clarity of available mobility options for customers.

- Users must specify journey details, including start and end points, and timing.
- The digital platform or mobility expert then provides transportation choices with detailed timings.
- Many trip-planning services offer user registration as a prominent feature.
- In telephonic systems, the user's phone number serves as the primary identifier for quick access to rider details.
- Digital platforms require registration with a personalized username and password.
- Registered users benefit from a log of past trip requests, allowing for swift selection of recurring trips and streamlining the interaction for both users and mobility managers.

Among the cases, three systems in our study include these features but two systems are paratransit and only allow registration based on approval of rider eligibility. These features are not evident in the rest of the cases.

To add to our assessment of the twenty-one programs we used the NCHRP framework of system functionality. The following table notes our simple scoring system based on the framework.

TABLE 2. ASSESSMENT OF 21 PROGRAMS BASED ON THE NCHRP FRAMEWORK OF SYSTEM FUNCTIONALITY

Level of Service	Details	Scoring	
Trip information	Lists of service providers, eligibility, and contact information are provided	Website or App (1); Call center (2); Website and Call Center (3)	
Matching Assistance	Customers supply search criteria or answer "triage questions" asked by a mobility specialist (call-taker) or prompted by an online system to reduce providers to viable options	Static information only (1), Matching Assistance provided (2)	
Trip Planning Assistance	Customers use online system or call a mobility specialist to get detailed ways to make a particular trip	Yes, with conditions – 1 Yes, without conditions – 2 No -0	
Trip Booking Assistance	Mobility specialist calls provider to book trip on behalf of customer	Single provider – 1, Multiple providers – 2, No -0	
Direct Trip Booking	Trip booking via links to paratransit systems (one system allows a scheduler from one partnering organization to schedule trips onto another partner's vehicle runs)		
Trip Payment integration	Integration of payment options on the website, app or through the call center	Single provider – 1, Multiple providers – 2, No -0	

Systems could obtain a maximum of 11 points for system functionality. Based on the scoring system, we compare the twenty-one systems as shown in the graph below. The median score of the systems is seven. Eight systems score above and eight score below the median score. The remaining five are at the median.

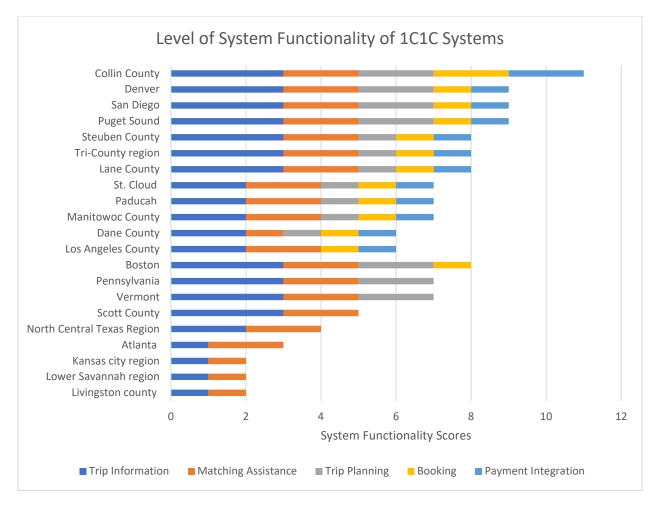
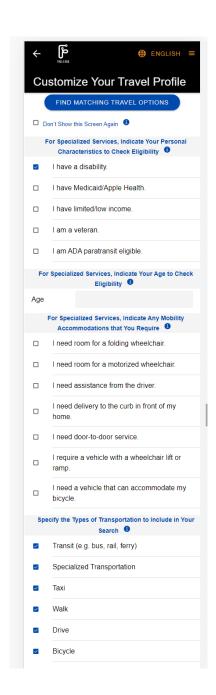


FIGURE 5. LEVEL OF SYSTEM FUNCTIONALITY

Trip information & Matching Assistance – Given the special needs of the client groups and our qualitative assessments from the interviews of system administrators we assumed that a call center with mobility management services was more desirable than a website or other static information. Therefore, a website alone got scored one (n=4), while a call center was scored two (n=6), and if a system had both it was scored three (n=11).

However, the presence of a call center or website does not guarantee high quality information. Therefore, for those organizations with a website we evaluated if it simply provided static information which was scored one (n=4) or a triage of questions led to improved and reduced options for trip planning which was scored two (n=17).



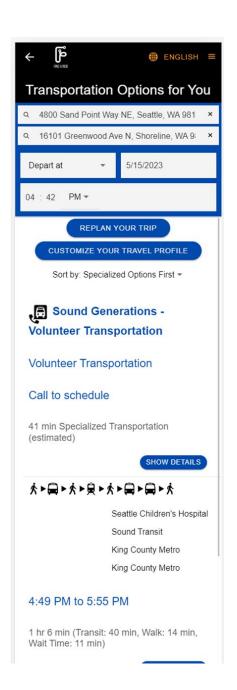


FIGURE 6 THE HOPELINK "FIND A RIDE" INTERFACE

Trip Planning Assistance — While providing detailed ways to make a trip within a service jurisdiction, some websites yielded no information unless origins and destinations were selected within a predetermined set of locations. These we scored one (n=7). And if the trip planner did not include such preset conditions and provided the best possible ways to make a trip, we scored it two (n=7). An important limitation of this scoring is that we did not evaluate those systems that did not have a trip planning web interface (n=7). See Figure 6 for an example of the Hopelink Trip Planner interface.

Trip Booking & Payment assistance — If the trip booking and payment interface involved only a single service provider, we scored the systems one for each variable. If the booking and payment integration included more than one service provider, we scored the systems two. Again, this assessment only includes those systems with web-based booking and payment integration. Eight systems scored zero booking integration and nine systems scored zero for payment integration. Twelve systems scored one for booking and 11 systems scored one for payment integration. Only the city of McKinney, Collin County system scored two for both booking and payment integration, but this integration is with a single transportation provider (DART).

1.4 Transportation System Characteristics

Transportation system characteristics and coordination efforts are crucial to the success of 1C1C systems. The level of coordination varies across systems, and this impacts the ease of navigation for customers. As the NCHRP system notes and our case studies show:

- These systems can have streamlined structures at various government levels, handling tasks from eligibility, reservations, scheduling, dispatching, and operations either holistically or partially.
- They may take the form of coordinated services involving government agencies, human service providers, and contractors in loose confederations.
- Regarding passenger mobility within transportation-disadvantaged groups, there is a distinction
 in the types of specialized rides required, including curb to curb, door to door, and door through
 door services.
- No single system in the country aims to serve all three categories of trips, but common themes
 often align with the types of trips and the level of passenger mobility.

State designated NEMT (Non-Emergency Medical Transportation) providers are organizations or entities that have been officially designated or approved by a state government to offer transportation services for individuals who require non-emergency medical trips. State governments typically regulate and oversee the NEMT program. They establish guidelines, standards, and criteria that NEMT providers must meet to be designated as official providers. State designated NEMT providers may receive payment directly from state Medicaid programs, private insurance, or other government funding sources.

The most onerous of tasks is the creation, maintenance, and updating of information about the coordination involved. A few state governments have taken on information management tasks, often through their departments of transportation. The case studies and the NCHRP report show that the following areas of coordination and information management must be thought through:

Customers: An information management system that includes personal information, medical conditions, and level of mobility. Customer information must be collected, stored, and protected. In addition, procedures for determining eligibility for programs and subsidies must be established.

Mobility managers: Mobility managers serve in local government and non-profit organizations as policy coordinators, operations service brokers, data managers, and customer travel navigators. They also organize and manage the various jurisdiction-specific transportation voucher programs. To effectively serve these functions, mobility managers must be kept abreast of each other's efforts and successes as

well as advancements in mobility management. This may include a working platform for managing their standard operating procedures, communications, training, and evaluation.

Volunteer Drivers: Volunteer driver programs are established for the recruitment, retention, and management of volunteer drivers who can be called upon—or self-assign themselves—to serve certain trips and especially trips for which no other transportation resource is available. The coordination includes management and deployment of drivers, their service time, vehicle inventory including driver's personal vehicle or common fleet, and reimbursement structures. There is also potential to connect volunteer drivers to needed trips.

Travel voucher/ subsidy program management: Travel voucher programs provide a flexible travel option that can both provide cost saving benefits to transportation providers and expand and enhance transportation options for individuals, especially in rural areas—or at times—where transportation resources are scarce. A centralized repository of programs and streamlined eligibility determination could enhance ease of transportation for customers and at the same time assist local mobility managers, senior center staff, and human service agencies to improve access to these programs.

Accessible Taxi, Transportation Provider, and Infrastructure Database: Many jurisdictions adopt ADA specifications to determine the level of accessibility of wheelchair-accessible vehicles (WAV) taxis in service. Proactive determination of standards of service and accessibility or the lack thereof may have implications for lower mobility clients. NCHRP also recommends an accessibility infrastructure database that includes useful information such as curb cuts, walk signalization assistance, the accessibility of bus stops, etc. The data could be crowd-sourced by customers and travel trainers and could be used in considering trip-by-trip conditional eligibility and paths of travel to improve travel experiences. Regularly updating transportation provider information, including service levels and geographic coverage, is essential for maintaining accuracy. Some systems employ a multi-agent approach, granting providers direct access to manual updates, while others depend on agency staff support. Regardless of the method, the quality of information is critical, and the primary responsibility for data management rests with the host agency.

Going beyond the primary function of connecting riders to potential trip providers, the Atlanta Regional Commission (ARC) in its one-click system (www.simplygetthere.org) had integrated all these information management pathways into a single web portal. However, the system was decommissioned in 2022 due to the lack of technical capacity, lower buy-in from other levels of government, and inconsistent streams of recurring funding. Technology upkeep was their biggest hurdle. From the ARC interview, it was evident that the extremely well-conceived system exponentially increased demand for the services and the backend technology failed to keep up with the growing needs of the system. The overhaul was extremely expensive and eventually, it became difficult to provide reliable and updated travel information through the existing portal.

2.0 Rides Served and Cost Per Ride

In addition to assessing qualitative information from the public data, we collated information on rides provided and costs per ride for twelve of the 1C1C systems. Using this data, we provide a preliminary assessment of the extent of need for trips by transportation disadvantaged populations that 1C1C systems served. For comparison we also provide comparable cost efficiency across these twelve systems.

2.1.1 Rides Served

As discussed earlier, we calculated "transportation disadvantaged" as adults over 65 below the federal poverty line and people at any age with a disability also below the federal poverty line. Using 2021 American Community Survey data, we estimated the total population of transportation-disadvantaged individuals and their total trip demand. Based on the 2017 National Travel Survey, the estimated national average person trip rate or the number of daily trips for older adults is approximately 3.19 (Lidbe et al., 2021). Comparing this with the number of trips provided by the 1C1C system gave us an idea of the service level, revealing that these systems meet only a fraction of the actual transportation needs of disadvantaged populations.



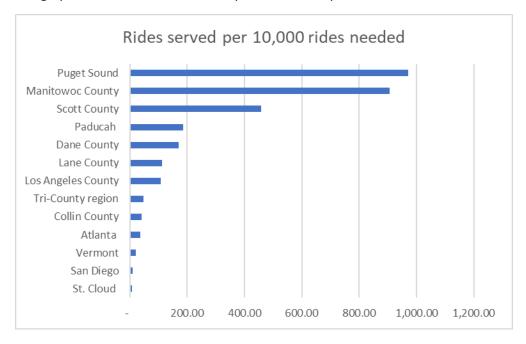


FIGURE 7. RIDES MET BY THE SYSTEM AS A PROPORTION OF RIDES NEEDED

2.1.2 Cost per Ride

As discussed in the earlier sections, the different case study systems are managed by various levels of government or nonprofit organizations. The management structure in the different host institutions for managing the web information, managing calls, enabling trip decisions, booking and payment result in differential costs per ride. To assess the cost per ride we used information gathered from annual budgets and reports wherever possible. These data points are not available for all systems and are not

available from consistent sources. Therefore, we analyzed the cost per ride for 12 of the 20 systems for which consistent data was available. The cost per ride is the total budget divided by the number of rides serviced in a year for which the data was available.

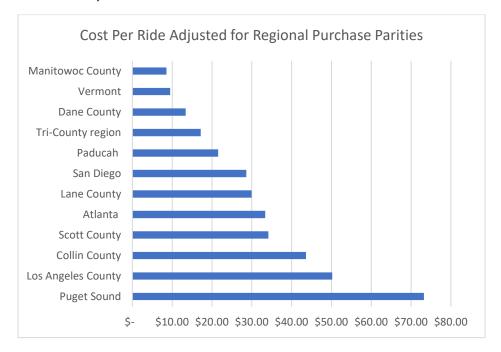


FIGURE 8. COST PER RIDE FOR THE HOSTING ENTITY

To make these assessments comparable across regions in the United States we used the Bureau of Economic Analysis' (BEA) Regional Price Parities (RPP) composite index. This spatial price index facilitates the comparison of price levels, thereby enabling the assessment of disparities in the cost of living across different geographical regions. To accomplish this, the Bureau of Economic Analysis (BEA) utilizes location-specific price data, as well as expenditure data sourced from the Bureau of Labor Statistics (BLS) and other relevant outlets. This data encompasses a wide array of goods and services, encompassing categories such as apparel, food, medical expenses, and housing costs. Subsequently, the BEA employs this comprehensive dataset to compute Regional Price Parities (RPPs) across nine distinct expenditure categories and for overall expenditures. As a fundamental principle of RPPs, they serve as a comparative measure, drawing a direct contrast between the average price level in each region and the national average encompassing all areas. Consequently, the RPP for the nation invariably registers as 100.

In the case of regional systems, our approach involves utilizing the nearest Metropolitan Statistical Area (MSA) level RPP composite index for those systems that serve MSAs. Conversely, for systems that do not have MSA coverage, we rely on the state-level non-metropolitan RPP composite index. To determine whether a given system overlaps with MSAs or not, we employ the Housing and Urban Development (HUD) Metropolitan Area Look Up Tool.

2.1.3 Comparing Rides Served and Cost Per Ride

Paratransit systems with full functionality—from trip information to booking and payment—average around \$18 per trip, serving approximately 130 rides out of every 10,000 needed. In contrast, systems with full functionality operating their own fleet have an average cost of \$40 per trip, covering around

380 out of 10,000 needed rides. A comparison of cost per ride to the host agency and the number of rides provided can be seen in the chart below:

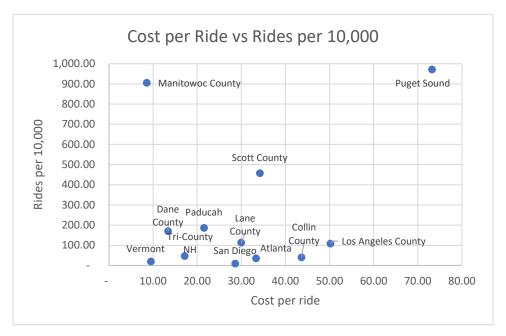


FIGURE 9. COST PER RIDE VS RIDES PER 10,000

While Scott County, Atlanta, and Vermont lack direct booking and payment functions, Vermont emerges as the most cost-efficient among them, with a cost per ride of \$9.49, lower than the \$33.76 average of the others. Despite this, Scott County records a higher utilization rate, providing 457 rides per 10,000 people — significantly surpassing both Atlanta's (currently decommissioned) and Vermont's figures. On average systems with fixed sources of funding provide more rides (284 per 10,000) and are more cost effective (\$25 per ride). The Hopelink system in three counties of Puget Sound is an exception. It is the most expensive of all systems, with only partial funding, but offers the greatest number of rides. Even in areas well-served by CBT, the services primarily focus on non-emergency medical trips, with non-medical and non-work-related travel often deprioritized despite increasing awareness of the impacts of social isolation among TD populations.

Understanding the variation in just aspects of system functionality and sustainability of 1C1C systems can help communities understand the level of service quality and funding needed to address the mobility challenges of TD. A high-functioning and sustainable transportation system may be an indicator of political will and committed resource allocation. These systems can serve as best practices for understanding how reliable and accessible a system is for the community.

Why are costs per ride so different?

Manitowoc County, a government transit provider had the lowest cost per ride at almost \$9 per ride. The highest was Hopelink of Puget Sound, a nonprofit, at almost \$75 per ride. Several factors may contribute to this price difference.

- Manitowoc County may benefit from economies of scale due to its smaller service area. Serving a smaller population and geography can lead to more efficient operations, reduced travel distances, and lower overhead costs, which can contribute to lower per-ride costs.
- Manitowoc County's transit system may have access to more stable or diverse funding sources, such as dedicated local or state funding, which can help offset costs. Hopelink, as a nonprofit, may rely more on donations and grants, which can be less predictable and insufficient to cover the full cost of services.
- The two organizations may have different service models. Manitowoc County may operate a
 more streamlined and cost-effective service model that optimizes routes and minimizes idle time,
 while Hopelink's model may require more extensive and costly coordination to cover a larger
 service area.
- While Hopelink provides more trips and serves a larger area, it may also face higher demand and congestion, leading to increased operational costs. Manitowoc County's lower service volume may allow for more efficient scheduling and routing.
- Labor costs can vary significantly between regions. Manitowoc County may have lower labor costs, whether due to wage differences or lower labor market competition, which can impact overall operational expenses.

3.0 Key Findings from Seven In-Depth Cases

We conducted semi-structured in-depth interviews to simulate a purposive sample of 1C1C systems by sending out emails to several types of host agencies serving different jurisdictional boundaries. Of about 15 emails we sent out, we received responses from seven host agencies, three of which are non-profit managed and four are government managed. Four systems serve counties: one serves a group of counties, one serves an MSA, and one covers a state. The seven systems include a wide range of institutional arrangements and are reasonably representative of inventory. System administrators and their team members participated in interviews between 60 to 80 minutes. This yielded a wealth of qualitative data on administrative challenges and future opportunities for 1C1C systems.

There are distinct differences between the operations and institutional arrangements of systems managed by non-profit institutions and government agencies. Our case study analyses show that three key factors influence the determinants of success for non-profit led systems. These include – access to federal funding, interest of county and state level government agencies, and the presence of local champions for mobility. These pre-requisites allow them to foster strong collaborative partnerships and an eco-system that enables small business vendors.

The following sections include key highlights from the seven in-depth case studies as they provide important lessons for future systems.

Simply Get There (Atlanta Regional Commission, GA):

The Atlanta Regional Commission (ARC) launched SimplyGetThere.org, a comprehensive trip planning tool designed for older adults and persons with disabilities. Garnering \$807,483 in grants, the platform linked over 200 vetted providers, becoming a centralized portal for trip coordination across various services, including volunteer and taxi rides. The platform was hosted and maintained by ARC, with data integration from ARC's ESP database. The site's technology stack included Open Trip Planner, Georgia Commute Options, and Taxi Fare Finder, among others.

Despite its initial success, the project faced challenges in maintaining updated data and securing ongoing funding for operations and technology upgrades. The ARC dedicated a small team for the site's support but did not establish a specific budget line or long-term plan for its sustainability. As a result, as ARC shifted its focus to commuter mobility the once-promising SimplyGetThere.org ceased functioning, underscoring the difficulties in maintaining such innovative initiatives without dedicated resources and consistent support.

Transportation Call Center (Dane County, WI):

Dane County's Transportation Call Center stands as a testament to integrated mobility management. Launched in 2008, the primary services include Metro Transit Fixed Route, Metro Paratransit, and contracted services like City of Moona Transit and City of Stoughton Public Transit. The call center, guided by the Human Services Coordinated Transportation Plan, identifies and addresses critical needs such as limited real-time travel technology and reduced private taxi services. The intake process at the call center screens callers for the most cost-effective transportation option, prioritizing medical trips. Dane County also contracts with providers for both medical and non-medical transportation, including subsidized bus passes for job seekers.

The center's ongoing operation highlights a strategic use of a mix of federal and state funds, demonstrating the importance of diversified funding streams for program sustainability. Despite its success, the call center faces challenges in ensuring widespread awareness of its services among other service providers and managing high call volumes with limited staff. Moreover, the current software lacks direct booking functionality, and plans for a web-based system face financial and integration hurdles. Rural areas in the county also experience significant service gaps due to limited transportation options.

FACT (San Diego County, CA):

FACT (Full Access and Coordinated Transportation), initiated in 2005 and incorporated in 2006, plays a vital role in San Diego County as a transportation brokerage and one-call dispatch service, focusing on individuals not served by ADA paratransit. It coordinates over 300 daily rides through partnerships with over 10 transportation providers, yet does not own any dedicated vehicles. FACT operates as a non-profit mobility management center, addressing transportation gaps in the public service area and providing services for those with limited options.

The organization uses the Ecolane software for dispatching rides and is developing a new platform for real-time ride dispatch to dedicated vehicles. Additionally, FACT is working with the 211 system to improve its Community Information Exchange, enhancing the tracking and response to transportation referrals. Plans for expansion include launching an app for ride registration and improving marketing efforts, although sustainable funding for these initiatives remains a challenge. Supported by over \$2 million from the VTCLI and other revenue streams, FACT exemplifies the impact of reliable funding on service continuity. However, the every-two-year competition for 5310 funds underscores the precarious nature of transit funding, with administrators advocating for a more stable financial approach to ensure focused delivery of critical transportation services.

Hopelink's Find My Ride (Puget Sound, WA):

Hopelink, a non-profit organization in Washington State, operates the Find a Ride system, serving King, Snohomish, and Pierce Counties. This online resource, initially managed by Sound Transit and now under Hopelink, offers various transportation options including public transit, special needs transportation, and community shuttles. Hopelink also coordinates DART Transit, Non-Emergency Medical Transportation, and operates as the Mobility Management agency, providing travel training programs in King County.

With plans for an expanded 1C1C system, it aims to offer a user-friendly interface and comprehensive trip planning. While it receives FTA funding and Medicaid reimbursements, there is no dedicated funding for the web-based system's development, a critical gap that poses a risk to its ambitious expansion and has historically impacted the reliability and maintenance of their web services. Despite the cost of \$73 per ride, Hopelink only fulfills a fraction of the region's needs, illuminating the pressing challenge of scaling services to meet demand within financial constraints.

DART Mobility Assistance (City of McKinney, Collin County, TX)

The DART mobility assistance program serves transportation disadvantaged populations in six cities of Collin County. Managed by City of McKinney, Collin County MPO, the program is currently funded by the FTA 5307, Urbanized Area Formula Funding program allocated to the city of McKinney, instead of 5310.

Users access services through the GoPass app for trip planning and ride booking, though 2/3 of bookings are made via a call center. The program, offering 6,000 monthly rides, includes DART's vehicles, contracted services, and subsidized Lyft rides. SPARE Labs manages client data and travel updates. Despite its potential, the program's future is uncertain beyond its current three-year funding, with over \$2 million in projected annual expenses for 2024. Additionally, inconsistencies in urban area boundaries and political jurisdictions add complexity to its operation.

Vermont Mobility Assist (Vermont)

Go Vermont, managed by the Vermont Agency of Transportation (VTrans), offers an integrated transportation solution aimed at reducing travel costs and environmental impact. Particularly noteworthy is the Older Adults and Persons with Disabilities Mobility Program, offering a travel information system and coordinated transportation services, including paratransit and public transit options. Despite the success bolstered by COVID recovery funding enabling free trips, future funding cuts could impact services. The VTrans Human Service Transportation Coordination Plan, using data from 2012, identifies community needs but lacks a detailed analysis of the gap between demand and supply for transportation services.

VTrans collaborates with the Vermont Public Transit Association and seven regional agencies, managing operations with a focus on up-to-date transportation information. While VTrans does not provide rides directly, it oversees local arrangements for transportation services. The Go Vermont trip planner, developed by Agile Mile, uses an open-source platform integrating various transportation feeds. Operational nuances include the handling of Dial-a-ride calls and the coordination of about 100,000 trips per month through regional agencies. Currently operational, Go Vermont plans to expand with microtransit pilots and on-demand ride services. Its biggest advantage is that the program, with an annual budget of \$900,000, is part of Vermont's larger public transportation budget of \$40 million, supported by various federal and local funding sources.

Access Services (Los Angeles County, CA)

Access Services Incorporated, as the ADA paratransit provider for Los Angeles County, California, coordinates 10,000 daily rides across 45 bus and rail systems. Serving as the Consolidated Transportation Services Agency (CTSA) for the county, Access Services requires riders to meet ADA eligibility, providing services through six regional contractors. Initiated to streamline paratransit across numerous transit systems, Access facilitates seamless travel for individuals with disabilities without the need for transfers.

The nonprofit agency is governed by a nine-member board and operates with a fleet of 600-800 vehicles, supplemented by contracted taxi drivers, and explores partnerships with Uber and Lyft. Access employs a database called Rider 360 for managing ride requests and eligibility, and its mobile app, Where's My Ride, offers real-time travel tracking, albeit with some limitations due to software integration issues. Access ensures seamless, shared rides for eligible users, with trips booked 24 hours in advance. Interestingly, a recent survey found that about 60% of Access riders also use Uber and Lyft for real-time travel needs. The service is funded 50% by federal FTA 5310 funding and 50% by local taxes, with plans to expand the integration of contractor software for improved service delivery.

The above examples provide a snapshot of the complexity of system management, funding, and technology. In the sections below, we discuss several of these systems' characteristics with examples.

3.1 Institutional Structure









Contracts

Collaborations

Brokerage

Direct Services

FIGURE 10 Types OF INSTITUTIONAL ARRANGEMENTS

Gaining insight into the institutional capacity of case systems provides valuable information about the present or lacking institutional elements necessary for fostering the collaboration required to facilitate the establishment of a one-call one-click (1C1C) transportation planning system. The study considers essential patterns within case agencies that contribute to obtaining institutional support and highlights potential areas that influence the viability and long-term sustainability of a one-call one-click system.

Key characteristics of institutional capacity include:

System Hosting and Management - In Atlanta, the SimplyGetThere.org website was hosted by the Atlanta Regional Commission (ARC), with ongoing IT maintenance and server hosting provided. The management of transportation service provider information was the responsibility of the Atlanta Area Agency on Aging (AAA), and the Division of Transportation Demand Management later took over site management from ARC. The importance of coordinated management and oversight for effective system functioning is highlighted.

On Demand Brokerage Systems:

The brokerage system has contracts with transportation providers to provide rides for the clients. The two main types are:

- Brokerage that does not include statewide non-emergency medical: The transportation center takes incoming requests to book some medical trips and refers all Medicaid trip requests to state broker. For example, Dane County negotiates fee agreements with contract providers to purchase medical trips. Some trips do qualify for Medicaid reimbursement. Dane County is not the designated NEMT contractor for the state of Wisconsin. Another example is FACTs San Diego. Its customers submit their requests through the call center; rides are dispatched as public or NMET rides to contracted medical services based on customer characteristics. Most of the fare for public rides is subsidized through state and federal funding sources; the rider pays a minimal fee based on the requested distance. Ride fares with contracted medical services are set at a negotiated fee-for-service rate.
- Brokerage that includes non-emergency medical contracts: None of the cases interviewed

Governance Structure and Leadership: Go Vermont is a system managed by the state of Vermont. The state's DOT manages the transportation provider information including the six regional transportation agencies and systems for recruiting local providers. They also host a continuously updated online trip information system and trip planner. Find My Ride PA (Pennsylvania) is another example of a state-managed system that works effectively. The PA DOT manages the trip information system and the client characteristics in a centralized portal. Local transportation agencies at the county level access this information to provide rides based on client eligibility for specific state programs. Access Services serves as the Consolidated Transportation Services Agency (CTSA) and the designated paratransit provider for LA County, demonstrating the importance of collaboration among diverse entities, with representatives from LA Metro, fixed route operators, and coalitions aiming to provide transportation solutions to transportation disadvantaged.

Collaborative Partnerships: Hopelink is a nonprofit managing the Find my Ride system in Puget Sound WA. The nonprofit provides rides and undertakes ride referrals through considerable efforts in building local coalitions of transportation providers and managing updated trip data. However, given the absence of dedicated funding and buy-in from state agencies, the system struggles to keep up and expand its services. Further data management and verification in three large counties can be expensive and time consuming, and Hopelink bears the sole responsibility for these tasks.

Regional Coordination and Oversight: The Go Vermont system emphasizes collaboration with the Vermont Public Transit Association (VPTA) and the establishment of Memoranda of Understanding (Mou's) with regional transit agencies, highlighting the importance of cohesive regional efforts and agreements to ensure effective transportation services. Additionally, the presence of public transit standing committees and councils at the state level underscores the significance of ongoing engagement and oversight in the transit realm.

3.2 Funding



FIGURE 11. TYPES OF OPERATIONS FUNDING

The accessibility to funding varies across each case study system. This is exemplified by the case of the Atlanta Regional Commission's Simplygetthere.org site, which decommissioned due to an absence of reliable funding. Different types of agencies, such as county-led agencies like Dane and nonprofit-led agencies like FACTS, demonstrate disparate funding mechanisms and capacities:

For county-led agencies like Dane:

- They receive direct financial support from the Federal Transit Administration (FTA) 5310 program to bolster transportation services for the transportation disadvantaged populations.
- Additionally, as a governmental entity, they secure direct funding from a state transportation funding source, further enhancing their capability to provide services to transportation disadvantaged.

For nonprofit-led agencies like FACT:

- They exhibit the capacity to negotiate prices and contracts with private transportation providers, ensuring cost-effective and efficient services but must compete for FTA 5310 funding every two years. There is always some uncertainty associated with non-dedicated funding sources.
- They also can raise philanthropic capital, contributing to their financial sustainability.

Access Services, although a nonprofit entity, operates as the designated ADA paratransit provider for LA County. Consequently, they receive a direct allocation of FTA 5310 funds. These reliable funding streams allow the system to operate about 800 vehicles of their own through 6 contractors and offer about 10,000 rides daily. In some cases, systems were recipients of innovation grants. For example, Atlanta obtained innovative grants through VTCLI. However, the lack of an allocated budget for ongoing human resources support, IT/software development, and software maintenance highlights a crucial consideration.

Important funding characteristics from the case study findings include:

Adaptation to Challenges: In 2021, Hopelink adapted to COVID-19 by collaborating with small businesses, aiding Medicaid clients, providing DRT rides, and assisting clients with Mobility Management. This adaptation highlighted their flexibility and responsiveness.

Dedicated Funding: Access Services, supported by federal CTSA funding, is vital to the transportation ecosystem. LA Metro, a transit operator and planning authority, grants Access Services, the ADA paratransit system, 50% of FTA 5310 funds; the county covers the rest. Go Vermont's \$900,000 budget is sourced from dedicated FTA, federal Congestion Mitigation and Air Quality (CMAQ), and Federal Highway Administration (FHWA) funds. A portion also comes from Section 5310 Enhanced Mobility for Seniors and Individuals with Disabilities, while local transit agencies contribute a 20% match from diverse sources.

Medicaid Reimbursement: Access Services recent ability to receive Medicaid reimbursement for approved medical trips emphasizes their commitment to ensuring accessible transportation for specific needs. Dane County and FACTS also receive Medicaid reimbursement for eligible riders of medical trips.

Resource Mobilization Strategies: FACTs San Diego relies on various funding sources, including Federal Transit 5310 funds, local matches, grants like Access for All, and state formula funding via CTSA. Revenue generation through fee-for-service contracts for medical trips and grant-seeking also supports their operations. The Dane County Transportation One Call Center's provision of transportation services relies on a combination of grants, programs, coordination, contracted services, and government support at various levels.

Innovation Grants, no dedicated funding: Funded through federal innovation grants, the Atlanta Regional Commission's SimplyGetThere.org site's phased development highlights challenges in ensuring long-term functionality due to a lack of dedicated funding for operations and maintenance.

While it was unsaid in the case of Atlanta, local priorities and political dynamics can impact access to funding. Collin County, for instance, uses the federal 5307 funds meant for urban transit on account of its designation as an Urbanized Census Area (UCA). This is formula funding they do not compete for. They have a 50% match, including formula funds from TX DOT and local funding. The formula funding is, however, changing as the UCA has been redefined, effectively changing their spatial jurisdiction, removing some cities, and adding others.

First established in 2006, the system under the jurisdiction of the city of McKinney has changed hands multiple times, attempting to access a range of funding mechanisms, and has been suspended multiple times as the service needs outgrew financial capacity.

3.3 Target Populations

The seven systems provide a range of mobility needs, typically specializing in one or two categories of mobility needs. For instance, a para-transit system providing curb-to-curb service may include additional Wheelchair Accessible Vehicles (WAVs) provide riders for door-to-door services for populations with partial or semi-independent mobility. In the following table we provide examples and important details of services that provide riders for different levels of mobility.

TABLE 3. LEVEL OF MOBILITY AND EXAMPLES FROM CASE STUDIES

Level of Mobility	Examples
Completely dependent	Access Services, LA County
mobility ADA-eligible mobility impairments may require specialized transportation with wheelchair-accessible vehicles or assistance for transfers.	 Local public entity Designated ADA Paratransit provider for all LA County One call, website for trip request Contract with 6 companies to provide rides 40 staff/ 3.9 million rides annually Direct recipient of 50% of FTA
Partial to Semi-Independent Mobility	 FACTs, San Diego County Local public entity/nonprofit Designated Coordinated Transportation Services
Partially dependent mobility: Mobility challenges may require assistance to move around, may rely on family members, caregivers, or specialized transportation services. Semi-independent mobility: Some mobility limitations but can still move around using mobility aids like canes, walkers, or motorized scooters, may	 Agency (state designation One call - Contracts with private providers to service riders outside ADA paratransit service areas, those not eligible for ADA Paratransit services, and those that need help to afford for-profit services. 4 staff - 7,830 public rides annually; 70,000 medical contract rides annually Competes for FTA 5310 every 2 years Direct recipient of state sales tax (\$200K)

need assistance with specific tasks but Generates fee for services with contract providers can still access transportation services independently. One Stop Transportation Center, Dane County, WI **County Government** One call - Transportation hotline, directs caller to feasible ride options: Refers resident back to fixed route option, paratransit, and then the Veteran's or RSVP Volunteer Driver programs. Refers resident to the statewide broker if the resident is on Medicaid and the trip is medical. Schedules contracted with private providers to service riders outside ADA paratransit service areas 3 staff/10,000 calls annually/# of rides annually Competes for FTA 5310 funding every 2 years. Direct recipient of a state line item for Transportation Disadvantaged.

Independent mobility: can manage transportation on their own, can walk, drive, or use public transportation without significant assistance.

3.4 Software and Technology

Varying approaches to data management and technology platforms are observed among different systems. Specific systems confine their data management scope to maintaining up-to-date listings of transportation providers in their area. For transportation referral purposes, a rider is offered personalized information through a trip planner platform, which filters options based on eligibility, mobility requirements, and cost. In contrast, alternative systems dispatch rides to their contracted providers or utilize their fleets.

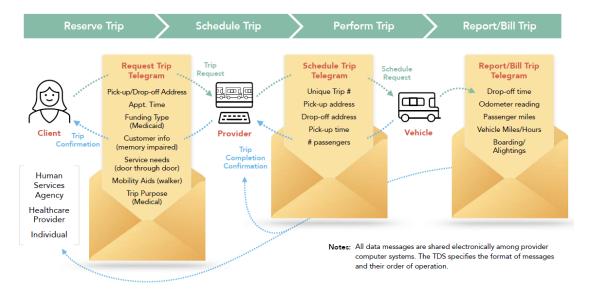


FIGURE 12. TRIP CYCLE SUPPORTED BY STANDARDIZING DATA SPECIFICATIONS ACROSS PROVIDERS (SOURCE: AARP)

Data management practices vary among organizations, ranging from basic transportation resource listings to the development of open-source web-based referral systems and trip planner software.

- Advanced initiatives often utilize GTFS (General Transit Feed Specification) and GTFS flex feeds, but these require significant staff capacity for data quality and control.
- The Atlanta Regional Commission (ARC) established a user-friendly web platform that offers one-click access to rider information and trip planning services.
- This platform matches users with potential transportation providers based on eligibility and geographic location, with dedicated staff support from the Area Agency on Aging and the Division of Transportation Demand Management.
- ARC adopted a collaborative approach involving multiple agencies to foster partnerships and promote the utilization of the web platform.

Notably, ARC faced challenges such as needing formal Memorandums of Understanding (MOUs) with partner agencies and organizations utilizing the platform. ARC also lacked a comprehensive business plan for continual technological enhancements and sustainable financial support.

In some instances, such as the case of the North Central Texas Council of Government (NCTCOG), the local options database only encompasses transportation providers funded by federal sources, excluding private providers. A crucial impediment to creating a comprehensive service provider coordination system continues to be disparate modalities in data management across service providers.

Key Themes from case study findings include:

Technology Platforms and Management:

- The Go Vermont trip planner, an open-source platform by Agile Mile, integrates transportation data feeds.
- SimplyGetThere.org, decommissioned by ARC in 2022, offered features like Open Trip Planner, eligibility assessment, and mobility manager access.
 - Open-source technology may not be unsustainable in the long run. While it offers
 flexibility and accessibility, owning and maintaining the open-source platform can be
 challenging. This challenge includes the need for ongoing software maintenance,
 especially if it is custom-built. Additionally, there may be compliance issues, such as
 meeting HIPAA requirements for healthcare data.
 - Being solely dependent on one technology provider carries inherent risks. If you do not
 own the technology, you may be at the provider's mercy for maintenance and updates.
 This risk can be mitigated by diversifying technology providers or solutions. A thorough
 risk assessment is essential to evaluate whether the host agency can effectively manage
 the associated tech risks.
 - Open-source technology may not always meet the stringent requirements of HIPAA compliance, particularly for healthcare-related transportation services such as Medicare and Medicaid rides. This is a significant consideration when choosing technological solutions.
 - Technology management and transportation inherently involve risks. Whether you own the technology or rely on a provider, there are challenges to address. Balancing the

advantages and disadvantages of different technological approaches is essential for successful transportation services.

Call Center and Mobility Management:

 Dane County Transportation's call center uses software for call recording and Mobility Manager for ride requests and data tracking. Limited software update flexibility necessitates potential new development.

Ride Dispatch and Real-time Solutions:

- FACT dispatches rides through Ecolane and is working on a new real-time, on-demand ride platform. Collaboration with United Way 211 led to a Community Information Exchange for tracking transportation referrals.
- FACTS is seeking grant funding to create an Ecolane APP for registering as a RideFACT rider.
- Access LA Services employs Rider 360, a database for ADA paratransit management, and offers
 online reservations and a real-time tracking app, Where's My Ride, in certain regions, integrated
 with 5M and Trapeze software.

As an example of system build out and sequencing, The development of the City of McKinney's DART RUN program followed a distinct sequencing of events:

- The DART Run program hosted and funded by the City of McKinney, Texas incorporates a user-friendly mobile app known as the Go Pass app, licensed through DART. The City of McKinney made a \$200,000 payment for a three-year license to use the Go Pass app, facilitating convenient and flexible ride scheduling. Users can schedule rides with a minimum of 2 hours' notice and enjoy real-time booking capabilities. The app offers multiple scheduling options, including specifying departure and arrival times and indicating the need for mobility devices. To ensure a seamless experience, riders are encouraged to schedule trips based on arrival times.
- SPARE Labs plays a crucial role in technology development for call center operations and IVR (Interactive Voice Response) automation. The proprietary software used for this purpose is called the "SPARE Platform." The Go Pass app, utilized for booking rides, seamlessly integrates with this system. Notably, the system can collaborate with ride-sharing services like Lyft, Uber, and taxi companies, utilizing NTI (National Transit Institute) software for efficient dispatching to vehicles. This integration enhances the program's flexibility and service efficiency.
 - Sequencing: In 2022, the DART RUN program commenced, initially managed by the small nonprofit organization, CCart, serving McKinney residents. CCart received 5307 funding until 2013. Subsequently, the nonprofit TAPS took over services from 2013 to 2015, effectively leveraging funds but eventually facing financial limitations that led to the suspension of services in 2015. Following this, McKinney took on a direct recipient role and established the urban transit district.
 - Current Status: Currently, the McKinney Urban Transit District is responsible for funding the app and website. DART's operational scope is limited to areas within its jurisdiction.
 To extend services beyond these boundaries, DART partners with Spare Labs, which manages the technology and third-party contracts. The call center, once available 24

- hours, now operates closer to specific service hours. Residents can utilize the Go Pass App for booking and payment of DART Run trips.
- Plans for Expansion: DART RUN holds a three-year contract to license the Go Pass App.
 Expanding the Urbanized Area (UZA) boundary to encompass Frisco, along with smaller communities like Paloma, represents a significant development for the DART Run program. However, Frisco's presence across Denton and Collin Counties introduces complexities with distinct funding mechanisms and priorities, resulting in a fragmentation of financial support sources.

3.5 Coordinated Human Services Transportation Plans

Following federal transit law, specifically under the Enhanced Mobility for Seniors and Individuals with Disabilities (Section 5310) Program, there is a requirement that projects selected for funding must be a part of a locally developed, coordinated public transit-human services transportation (HST) plan. All but one (Collin County) of the seven 1C1C systems utilize 5310 funds for operations; therefore, we reviewed HST plans to determine if 1C1C is considered during plan development. HST plans for the six in-depth case studies reveal the following:

- Funded projects must be integrated into locally developed, coordinated public transit-human services transportation plans.
- These plans are expected to undergo development and approval through a participatory process, including involvement from seniors, individuals with disabilities, public, private, and nonprofit transportation providers, human services representatives, and the public.
- The coordinated plans primarily aim to identify transportation needs among individuals with disabilities, older adults, and low-income individuals.
- They also provide strategies for addressing these needs and establish priorities for funding and implementing transportation services.

Of the Human Services Coordinated Transportation (HST) plans reviewed in our case study analysis, encompassing 20 cases:

- Most plans were adopted between 2017 and 2019.
- Federal law mandates coordinated transportation plans to allocate Federal Transit Administration (FTA) 5310 funds, but their formal integration into prioritizing Regional Transportation Plan (RTP) projects remains unclear.
- The ARC (Atlanta Regional Commission) process for allocating 5310 funds appears to be influenced by plan recommendations, although the HST (Human Services Transportation) plan itself has not been updated since 2017.
- In 2020, a Demand Response Plan was adopted to address the gap left by the outdated HST plan, but the reasons for not directly updating the HST plan are not clear.

Problem identification most often also distinctly points to the need for coordinated information and mobility management for special needs populations.

- Some plans emphasize the importance of:
 - Centralized eligibility determination

- Coordinated and updated repositories of Community-Based Transportation (CBT) providers and their service areas
- Common criteria for sourcing vendors
- Universal software adoption
- These elements collectively serve as the foundation for 1C1C systems, even if they do not always use the 1C1C terminology.
- The primary objective of these plans is often to prepare special needs populations for transit usage, with a secondary focus on enhancing efficiency and cost-effectiveness rather than service effectiveness.

While federal law necessitates these plans for 5310 funding allocation, they do not appear to be an integral part of a formal decision-making process, as evidenced by the outdated plan adoption dates. However, Regional Transportation Plans (RTPs) are updated every three years, suggesting an opportunity for greater alignment and integration of HST plans into the decision-making process.

After reviewing the HST plans of six of the seven in-depth cases, we found that they provide valuable insight into the challenges and solutions associated with providing services for transportation disadvantaged populations. It is noteworthy that Collin County does not draw resources from the FTA 5310 and consequently does not participate in preparing an HST plan.

- Analysis identified seven categories of challenges and gaps consistently present in the six plans:
 - Communication
 - Funding
 - Service area
 - Booking
 - Technology
 - Service
 - o Rider costs

Our method for HST coding utilized an iterative qualitative content analysis process, following the methodology established by Elo and Kyngas (2008), which involved multiple reviewers in a three-step content analysis process: preparation, organizing, and reporting. The most current HST plan for each system was downloaded into a shared file system during the preparation phase. The analysis categorized the HST plans into two thematic categories: challenges and 1C1C solutions. Each thematic category included several sub-categories to provide additional details on the types of challenges and how 1C1C solutions were presented in the HST plans. A table with identified categories and subcategories was created for the six systems included in the HST plan review. One reviewer conducted an initial review of each plan by capturing statements from the HST plans within the table, and these findings were reviewed by two additional reviewers for accuracy. After the multi-coder review process, findings were translated into yes and no indicators indicating the presence or absence of coding categories and subcategories and reported in a summary table. For example, if an HST plan indicated challenges with communication, it was coded as "yes," and these indicators were translated into numerical values (1=yes; 0=no) to calculate response percentages in each category and subcategory.

TABLE 4. SUMMARY OF HST PLAN CODING

	Challenges				1C1C solution				
System	Comm.	Funds	Area	Booking	Tech.	Services	Cost	Discussed	Lead Agency ID'd
Puget Sound, WA	1	1	1	1	0	1	1	1	1
Dane County, WI	1	1	1	1	1	1	1	1	1
Atlanta, GA	0	0	1	1	1	1	1	0	0
Los Angeles, CA	1	1	1	1	1	1	0	1	1
San Diego, CA	0	0	1	1	1	1	1	1	1
Vermont	1	0	1	0	0	1	0	1	1
% of Total (6)	67%	50%	100%	83%	67%	100%	67%	83%	83%

1=yes. 0=no. % rounded to nearest whole number.

All six systems reported problems related to service areas and services:

- In the service area category, the most frequently reported challenge was connecting to rural areas (67%).
- Regarding services, 83% of systems reported issues related to infrastructure disrepair at transit stops and limited-service times.
- 83% also reported difficulties with booking rides, particularly citing an overly complicated booking process.
- Communication and rider cost challenges were reported by 67% of the systems.
- Communication problems often revolved around inconsistent reporting standards, coordination efforts across providers, and issues in communicating available services with riders.
- Systems addressing rider cost challenges indicated that even subsidized fares were costprohibitive for low-income households, particularly if multiple household members used transportation services.
- Technology-related limitations were noted, including limited access to smart devices or the Internet (50%) and limited knowledge of using the Internet or transportation applications on a smartphone (33%).
- Funding limitations, encompassing obtaining and maintaining sufficient funds to operate
 existing programs and implement new ones, posed challenges for 50% of the HST plans
 reviewed.

In addition to identifying challenges related to providing service to the transportation disadvantaged, the HST plans to outline potential solutions.

- Many proposed solutions align closely with the purpose of 1C1C programs, including presenting 1C1C programs as a specific solution.
- 83% of the HST plans indicate 1C1C as a potential solution for the transportation disadvantaged population. Of those plans that indicated 1C1C as a potential solution, all identified a 1C1C administrator or lead agency within the plan.

- Atlanta's HST Plan did not specify a lead agency in their HST plan and subsequently ended its 1C1C program shortly after implementation.
 - This observation suggests that outlining clear directives for 1C1C implementation, including the identification of the program administrator, in HST plans may contribute to program success.

3.6 Challenges for Community Based Transportation

Funding Instability: A significant issue for many transportation programs is the reliance on one-time or competitive grants. These funding sources are not consistent or reliable, making it difficult to maintain sustainable transportation services for target populations. This lack of financial stability and predictability impedes the integration of these programs into mainstream transportation options, limiting their effectiveness and longevity.

TABLE 5. STATUS OF FUNDING SUSTAINABILITY IN THE INVENTORY

Funding Type		Number of Systems		
-	Dedicated Annual Funding	-	11	
-	Partial Funding	-	4	
-	No Dedicated Funding	-	2 (Decommissioned)	

Local Market Responsiveness: There is a notable lack of responsiveness in local markets to the transportation needs of the transportation disadvantaged, characterized by:

- <u>Supply Gap in Private Providers</u>: A scarcity of drivers leads to insufficient coverage and longer wait times, impacting service accessibility.
- <u>Inadequate Vehicle Accessibility</u>: Many vehicles are not equipped with necessary features like wheelchair accessibility and specialized seating.
- <u>Specialized Service Shortage</u>: Some systems provide only basic door-to-door services, failing to fully address the needs of transportation disadvantaged.
- <u>Outdated Technology</u>: Reliance on proprietary software with limited upgradeability restricts the adoption of innovative solutions like on-demand services and real-time tracking.

Operational and Expansion Limitations: System operation and expansion limitations are hindered by:

- An absence of dedicated funding and leadership: Without consistent financial support, transportation systems struggle to execute long-term solutions. I.e., Atlanta Regional Commission, LinkforCare.org
- Continuity of Service disruption: There are interruptions in service continuity without dedicated funding. Rides are necessary, not just an information portal – successful programs have contracted services or their own fleet, not volunteers, reliable access to transportation system structure.

- Technology limitations Organizations face technological constraints that hinder adequate service
 provision. While GTFS and GTFS flex feeds provide real-time data, many organizations lack the
 necessary staff capacity to manually update information for other providers and ride details. This
 manual process burdens resources and time, potentially leading to inaccuracies and inconsistencies
 in data.
- Unpredictable Funding Competition: The biennial competition for FTA 5310 funding introduces
 uncertainty into funding availability. Organizations must navigate this process, which adds
 administrative complexity and strains resources. The unpredictability of funding makes it challenging
 for organizations to establish stable, well-rounded transportation services for transportation
 disadvantaged.

3.7 Opportunities for Community Based Transportation

Software Flexibility: There is a need for software flexibility among transportation vendors. Communities do not find value in connecting all transportation providers through a single and specific software. We need to find and promote compatible workarounds because transportation providers prefer to use their own systems.

Volunteer Driver Shortage – The shortage of volunteer drivers is a challenge but essential in addressing the shortage of services. Addressing this requires incentives and outreach to recruit a pool of drivers.

Dedicated Advocacy – Establishing a champion is crucial. Need this support to prioritize the importance of transportation services for transportation disadvantaged and garner support from stakeholders and policymakers.

Coordination and Partnerships – The success of coordinated transportation services requires collaboration among public and private providers. Sustainable funding models are needed to ensure seamless coordination of rides among vendors.

Marketing of Services: All case study locations reported a lack of consistent marketing of transportation services. They were concerned about raising expectations in a severely underserved service area.

4.0 Key Lessons for San Antonio







Dedicated funding and inter-governmental collaboration

Centralized information and rides

A robust technology backbone







Dedicated and trained staff

Well-structured contractual arrangements

A strong local champion

FIGURE 13. 6 KEY LESSONS FOR SAN ANTONIO

4.1 Learnings from the One-Call One-Click Kickoff Event

Gaining insights into San Antonio's current transportation scenario is essential for advancing the development of a One-Call-One-Click (1C1C) transportation system. A recent 1C1C event brought to light various deficiencies in the existing system.

Rider and Mobility Challenges:

- Challenges faced by riders include inadequate communication with drivers, frequent lack of
 available transportation services (especially problematic for wheelchair users), and drivers
 cancelling trips without notice. Issues such as prolonged wait times, drivers' tardiness, and the
 absence of door-to-door services further impair the system's functionality.
- Building a 1C1C system also involves overcoming specific barriers, such as servicing the
 transportation disadvantaged who may not have access or familiarity with smartphones or
 computers, accommodating individuals with limited incomes and language barriers, addressing
 vehicle type restrictions, and extending the service area beyond the current coverage zone.

Challenges for Institutional Collaboration:

On the positive side, there is evident collaboration among stakeholders, showing a commitment to meet the needs of transportation disadvantaged, with some collaboration already in place, providing a foundation for more extensive efforts. Stakeholders are keen to understand and address the specific requirements of this demographic. However, this interest in collaboration must turn into strong contractual or other types of arrangements with clearly defined roles and responsibilities.

The San Antonio 1C1C program should involve a diverse range of stakeholders, including AACOG (Alamo Area Council of Governments), COSA (City of San Antonio), VIA (VIA Metropolitan Transit), ASC (Aging and Disability Resource Center), the tech sector, 211 (information and referral services), nonprofit providers, for-profit providers, healthcare organizations, faith-based organizations, and employers. The inclusion of these entities ensures a holistic and comprehensive approach to addressing transportation needs for transportation disadvantaged populations.

Service Area and Infrastructure Challenges

- The system faces challenges, including a shortage of transportation providers and vehicles which limits service availability, difficulty in securing sufficient funding impacting service quality and scale, and the cost of services being prohibitive for transportation disadvantaged.
- The spatial coverage of services is inadequate. Additionally, traversing different city areas, like from East to West San Antonio, is notably challenging. Difficulties in efficiently connecting with transport providers and the affordability of rides are also concerns.
- Geographic distances, especially in areas with limited coverage, pose additional challenges. The
 lack of vehicles equipped for wheelchair users reduces accessibility and limited-service
 availability on weekends further restricts access.

4.2 An Overview of Lessons from the Case Studies

Before we begin evaluating San Antonio's readiness to develop a 1C1C system there are multiple important considerations. The following aspects contribute to successful 1C1C systems.

The most successful systems with centralized information management on clients (demand-side) and contractors and service providers (supply side) are government agencies with dedicated funding streams. A state-level policy outlook to subsidize and support the transportation needs of transportation disadvantaged populations is beneficial. This is a critical area of advocacy for nonprofits in SA and TX.

The ideal structure involves various levels of government in the provision of different services and human resources.

- It encompasses a wide spectrum of transportation options designed to meet diverse mobility needs.
- This structure may entail:
 - State agencies managing information infrastructure.

- County/city governments oversee public transportation and paratransit services.
- Local contractors, including non-profits and private trip providers, operating under a unified brokerage agreement at the local level.
- These arrangements may also include non-emergency medical trips.

On-demand transportation technology is rapidly evolving, driven by the increased use of artificial intelligence.

- While this advancement holds the potential to alleviate some challenges in standardizing data across service providers, no single 1C1C system has successfully coordinated service offerings without robust local contractual arrangements and a commitment to maintaining standard data protocols.
- This suggests that all interested service providers in San Antonio and Bexar County must be
 prepared to undergo a technology overhaul, provide staff training, and standardize their
 operating procedures to enable the establishment of a common system.
- Implementing such a common system would be a pioneering effort in the country, representing a significant milestone in transportation coordination.

4.2.1 Institutional Arrangements, Roles, and Responsibilities

In an ideal system, the state of Texas would establish a framework for coordinated community-based transportation services and provide support to regional or local governments looking to implement such programs.

- The framework might encompass development assistance, training support, software, mandated evaluation criteria, and funding assistance.
- Regional or local catchment areas and this framework approach are particularly relevant in states where numerous regional or local governments are interested and capable of offering linkage services.
- For example, the Go Vermont system's annual budget of \$900,000 for system and technology management is part of Vermont's larger public transportation budget, totaling \$40 million and supported by various federal and local funding sources. The presence of dedicated IT staff ensures high-quality and real-time data updates and technology upgrades, which can be costly.
- Conversely, the Atlanta Regional Commission's county-level information referral system was decommissioned despite receiving over \$800,000 in federal grants.

Since Texas is a large state and different counties have varying levels of commitment to serving the transportation disadvantaged, we recommend a regional or multi-county program in the Bexar County region. This has the potential to overcome some of the geographic distance challenges highlighted in the kick-off event, while offering some of the benefits of economies in managing the One Call One Click system. The build out can start with Bexar County with a vision to fold adjacent counties into the system. This arrangement will have implications for multiple decisions on technology hosting,

establishing standard operating procedures, legal compliance, client intake and eligibility determination and multiple other aspects of the system development.

4.2.2 Development of local vendors

A key lesson for San Antonio in coordinating transportation for the transportation disadvantaged is the pressing need to address inherent deficiencies in local transportation markets' responsiveness to their specific needs.

- Recognizing supply gaps, inadequate vehicle accessibility, and shortages of specialized services highlights immediate challenges that require attention.
- To effectively increase supply, San Antonio should consider the roles of government agencies and nonprofits and their capacity to establish an institutional framework to support a coordinated 1C1C system.
- The initial step should involve conducting a comprehensive assessment of the current state of transportation services in San Antonio, with a specific focus on the accessibility and availability of services for transportation disadvantaged populations.

This assessment should involve close collaboration between government agencies and nonprofit organizations, as both play pivotal roles in addressing these challenges. Government agencies can regulate, incentivize, and coordinate private providers while ensuring compliance with accessibility standards. Nonprofits play a vital role in advocating for transportation disadvantaged populations, providing specialized services, and bridging gaps in service provision. A collaborative and well-coordinated effort between these entities is necessary to build out the supply of accessible transportation services, improving the mobility and quality of life for transportation disadvantaged in San Antonio.

4.2.3 Service Area and Coverage

Ensuring adequate interest and participation from transportation providers might be difficult, potentially leading to a restricted range of transportation choices for users and, consequently, affecting the system's overall effectiveness. Even after the deployment of 1C1C, consumers may still face limitations in transportation options due to insufficient coverage areas and a lack of coordinated transfer options. Therefore, a certain level of flexibility in how the system is developed and how vendors, small businesses and volunteers are engaged will determine the reliability of service provision. The trade-offs of these decisions will be discussed in later stages after an extensive assessment of the current community assets has been conducted.

References

- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of advanced nursing*, *62*(1), 107-115. https://doi.org/10.1111/j.1365-2648.2007.04569.x
- Hess, D. B., & Russell, J. K. (2012). Influence of built environment and transportation access on body mass index of older adults: Survey results from Erie County, New York. *Transport Policy*, 20, 128–137. https://doi.org/10.1016/j.tranpol.2012.01.010
- Lidbe, A., Adanu, E. K., Penmetsa, P., & Jones, S. (2021). Changes in the travel patterns of older

 Americans with medical conditions: A comparison of 2001 and 2017 NHTS data. *Transportation*Research Interdisciplinary Perspectives, 11, 100463. https://doi.org/10.1016/j.trip.2021.100463
- Loukaitou-Sideris, A., Wachs, M., & Pinski, M. (2019). Toward a Richer Picture of the Mobility Needs of Older Americans. *Journal of the American Planning Association*, *85*(4), Article 4. https://doi.org/10.1080/01944363.2019.1630295
- Ozbilen, B., Akar, G., White, K., Dabelko-Schoeny, H., & Cao, Q. (2022). Analysing the travel behaviour of older adults: What are the determinants of sustainable mobility? *Ageing & Society*, 1–29. https://doi.org/10.1017/S0144686X22001180

Appendix A: Case Study Profiles

Access Services Los Angeles County, CA

Type of System	One Call Paratransit/online reservations; para-transit only
Geographic Coverage	Los Angeles County
Type of Clients Served	Paratransit eligible
Year of initial operation	1990
Legal status of Host Entity	Local public entity
Annual rides	10,000/day; 3.9 million annually

Brief System Background

Access Services Incorporated, a local public entity, is the designated provider of ADA paratransit for Los Angeles County, California. Los Angeles has 45 different bus and rail systems in the county, providing 10,000 rides daily and 3.6 million rides annually. Access is the paratransit provider for all entities and serves as the County's designated Consolidated Transportation Services Agency (CTSA). Riders must meet ADA paratransit eligibility requirements demonstrating challenges to travel on fixed route services. Paratransit services are organized into six different regions in the county with 6 different contractors to provide rides. An eligible rider calls the contractor that serves the region based on a trip's origin. All trips require a 24-hour reservation in advance of the trip.

Needs Assessment

Access emerged as the primary para-transit provider in LA County due to its unique position in serving the transportation needs of individuals with disabilities. In a region encompassing 88 cities and operating 45 distinct transit systems, the passage of the ADA Act mandated the provision of para-transit services for those unable to use fixed routes. Under this requirement, there could have been 45 separate para-transit systems, resulting in a complex web of transfers for disabled individuals traveling across different transit systems. However, to address this challenge, a decision was made in 1990 to establish a single, comprehensive para-transit system that could seamlessly accommodate trips without transferring. This consolidated approach significantly improved accessibility and convenience, ensuring that individuals with disabilities could enjoy smoother and more efficient transportation throughout the county.

Institutional Structure

Executive and decision-making

Access Services is a local public entity and serves as the designated Consolidated Transportation Services Agency (CTSA). It is governed by a nine-member board of directors, with one appointed by LA Metro,

among other fixed route operators and commissions and coalitions representing transportation disadvantaged. As the CTSA, Access Services administers the coordinated human services transportation plan for LA County.

Operations management (backend)

Contractors have limited access to the Access rider database to confirm rider eligibility.

Online reservations are pushed to the contractor based on trip origin.

Access's Mobility Management Department provides direct assistance to riders; the field requests from other municipal departments, such as a senior center. They assist in helping the individual apply for paratransit services or help connect them to other resources.

Operations front-end: Drivers and contractors

The Access Services fleet includes 600-800 owned vehicles operated by six contractors.

The contract providers employ # drivers and deliver 10,000 rides daily.

Access contracts directly with taxi drivers that meet their safety requirements and background checks to meet growing demand. During the pandemic, the fleet was expanded to include 1,200 taxi drivers, but the taxi pool. Post-pandemic, the taxi pool has diminished substantially. Access is exploring contracts with Uber and Lyft as replacement taxi rides but has some difficulties due to differences in the safety and background checks required by these companies. Access cannot impose safety requirements on these drivers.

The fleet consists of minivans with wheelchair and scooter accessibility and some sedans. Only 20% of the riders require wheelchair-accessible vehicles.

Access does not make any driving or booking trips; it is just a contracting administrative agency that owns vehicles and employs 70-75 FTE to support Access Services office

Software and Technology

Access Services maintains a singular database called Rider 360, purpose-built for the organization to manage rider files and eligibility for receiving ADA paratransit. Riders can call a single call center number and be routed to the appropriate contractor or call the contractor directly to schedule a trip. Access now operates an online reservation website allowing riders to request a trip, which is then transmitted to the appropriate contractor based on trip origin. Where's My Ride, Access's new mobile app, allows riders to track real-time travel in some county regions. Not all contractor software matches the new App, but future bid criteria require dispatcher software to integrate with the App to expand real-time travel in all regions. Software from 5M and Trapeze integrated with the App.

Rides provided, and Nuances of Operations Management

- A ride is a single, uninterrupted trip from the trip's origin to its destination, typically facilitated by a single contractor. Riders do not need to make transfers during the journey.
- Access is a shared ride service that aims to group two to three individuals in the same vehicle whenever possible. Trip chaining, where a rider travels from location A to B and then to C, requires each segment to be reserved as a separate trip due to federal regulations.
- All service riders must meet the eligibility criteria established by the Americans with Disabilities Act (ADA) to qualify for paratransit services.
- Individuals not meeting the ADA paratransit eligibility criteria are directed to alternative transportation resources, including city dial-a-ride programs, travel training, or fixed-route transit services.
- A recent survey revealed that approximately 60% of Access riders utilize ride-sharing platforms such as Uber and Lyft to fulfill their real-time travel requirements.
- Notably, not all dispatcher software systems integrate with the "Where's My Ride" app, leading to limitations in providing real-time travel information, particularly in specific regions.

System Implementation

Sequencing

- Access operates a centralized call center where incoming calls are routed to one of six contractors based on the trip's point of origin.
- Direct Contractor Booking by Riders:
 - Riders can contact the contractor associated with their trip's origin to make a reservation.
 - Access offers an online platform on its website that enables riders to request a ride.
 Once requested, the ride details are transmitted to the appropriate contractor based on the trip's origin. The contractor then completes the booking process and confirms the trip directly with the rider.

Current Status

Mobile App Where's My Ride tracks real-time travel but is limited to some regions based on integration limitations of some contractor dispatch software.

Plans for Expansion

Bid criteria require that all contractor dispatch software integrates seamlessly with "Where's My Ride," ensuring that all riders can track real-time travel information.

Detailed Funding Strategy and Mechanisms

Access Services can receive federal money directly as the designated CTSA for Los Angeles County. Unlike FACTS and SANDAG, LA Metro is both the transit operator and the planning authority. The ADAmandated paratransit system receives 50% of the region's FTA 5310 funding. It does not compete with other potential recipients of FTA 5310. The region cannot let Access fall below the designated funding requirement for paratransit operations. Los Angeles County funds the remaining 50% of Access's budget with local tax dollars.

Non-Emergency Medical Transportation (NMET) is separate from Access Services. Still, due to recent changes, Access has received Medicaid reimbursement for some trips when the rider is recognized as a Medicaid recipient and the trip is an approved medical trip.

Challenges and Opportunities

A significant challenge in providing coordinated transportation services for transportation disadvantaged is the impact of the pandemic, which led to the decline of many taxi services, resulting in reliance on Uber and Lyft. However, this transition poses difficulties as these ride-hailing services need specific safety requirements, making it challenging for Access to impose necessary standards on their drivers. Many eligible Access customers also opt for Transportation Network Companies (TNCs) like Uber and Lyft due to their real-time convenience. Access fares, funded partly by federal and local sales tax, can also be a substantial factor, ranging from \$2.75 to \$3.50 for longer trips, with a total trip cost averaging \$50-60 per ride.

Atlanta Regional Commission (Simply Get There, Atlanta, GA)

Type of System	One-Click, multiple agents
Geographic Coverage	Entire MSA
Type of Clients Served	Transportation disadvantaged
Year of initial operation	2013
Legal status of Host Entity	Quasi-Governmental
Annual Visits to Site	400 visits to the site per year

Brief System Background

The Atlanta Regional Commission, with the leadership of the Atlanta Area Agency on Aging, developed the trip planning tool, SimplyGetThere.org to make it easier for transportation disadvantaged to plan and make a trip. The original partnership for the One-Click system included the Atlanta Regional Commission, Disability Link, VA Medical Center Atlanta, Goodwill, Cobb Community Transit, the Atlanta Regional Workforce Development Board, and the Atlanta Aging and Disability Resource Center. The successful application for VTCLI grant funds supported the phase 1 development of the project and marketing and outreach. The site supported consumer search of public information on transportation

options, the ability to compare options by time, origin/destination, costs, eligibility, and mobility support.

ARC successfully won a second round of VTCLI funding to support soft marketing and training of case managers on how to use the site. ARC also received FTA's Rides to Wellness grant and continues work with 4 regional clinics to increase the number of rides.

There was a vision among regional providers to increase the OC/OC functionality to schedule trips, book trips, and pay directly on the SimplyGetThere.org site, but due to the lack of a dedicated funding source, limited IT support, and ongoing technical difficulties with the site due to outdated technology. ARC decommissioned the site in 2022.

Needs Assessment

In areas where transportation options are available, several limitations hinder their use. Common barriers faced by high-need, special transportation (HST) populations include a lack of wheelchair-accessible shuttles, poorly maintained sidewalks, and inadequate lighting. These infrastructure challenges can restrict mobility and access to transportation services.

Safety and security are major concerns for HST populations when using public transportation. Issues such as panhandling, crime, and a perception of crime create barriers to using transit services. Ensuring the safety of passengers is essential to encourage their utilization of public transportation.

While MARTA train stations and trains are ADA-accessible, short-term difficulties arise due to malfunctioning or closed elevators. Inconsistent stop announcements can also be a barrier for passengers with disabilities. Additionally, while all buses in Atlanta's regional transit system are ADA-compliant, not all bus stops are connected to accessible sidewalks, rendering many stops inaccessible to individuals with mobility challenges.

Demand response programs provide flexible transportation options and are not universally available across all areas. Moreover, lacking a regional database with up-to-date information can impede access to these services. Issues related to awareness, service consistency due to volunteer turnover, and the personal ownership of vehicles (which may not be ADA accessible) can affect the viability and sustainability of demand response programs.

Low-income areas, particularly in the Atlanta region, are often described as "healthcare deserts" due to a lack of transportation options to reach healthcare centers. This disparity in access to healthcare services underscores the importance of addressing transportation gaps in underserved communities.

Two primary concerns stand out among the identified challenges related to infrastructure and service parameters. The first is the absence of translation services for driving and transit, making navigating transportation options difficult for individuals with language barriers. The second concern is the lack of wheelchair accessibility, not only in transit services but also in carpool/shuttle and taxi/TNC services, posing barriers to mobility for those with physical disabilities.

Executive and decision making

The Atlanta Regional Commission, through the Atlanta Area Agency on Aging, was the host for SimplyGetThere.org. ARC provided server hosting and ongoing IT maintenance. The site was supported by ARC's ESP (Aging Services) database. The AAA followed string protocols for adding transportation service provider information into the ESP database. ESP data was cleaned regularly by AAA staff. ARC leadership transferred site management to the Division of Transportation Demand Management.

ARC did not have any MOUS for participation by partner agencies and organizations to use the site. The ARC did not have a business plan for future build-out of the site.

Operations management (backend)

The site serves as an information and referral system and is currently housed at the Atlanta Regional Commission. The platform supports other regional mobility management efforts, including local governments, human services providers, nonprofits, and travel navigators. The system is supported through a network of regional mobility managers, travel training support, ADA paratransit services, volunteer drivers, and vouchers for private services, including taxi providers. ARC's Area Agency on Aging trained case managers on how to use the site. To increase the number of users on the site, ARC established a trained corps of volunteers to host training sessions for human service providers throughout the 18-county metro area.

Operations front-end: Drivers and contractors

ARC did not own any capital to support the site. The site served as information and referral. Area providers applied to include company information in the system and were vetted by the Atlanta Area Agency on Aging. Transportation providers were geographically sorted out. Once an individual puts in their information, they would be matched with potential providers by eligibility and zip code area. The site provided a range of costs, so the rider had an idea of the expense of each option.

Software and Technology

ARC decommissioned the site SimplyGetThere.org in 2022. The original technology supported:

SimplyGetThere.org was developed and supported by the Cambridge Systematics deployment of open-source software. Capability included:

- Open Trip Planner;
- Streamlined Eligibility;
- Georgia Commute Options (website/API link);
- Enhanced Services Program ESP (Atlanta Area Agency on Aging's services database);
- Taxi Fare Finder (website/API); and
- Login information for mobility managers to have access to information on the site.

Rides provided, and Nuances of Operations Management

The site is non-functional. ARC dedicated 2.5 FTEs to support the SimplygetThere.org site. The Area Agency on Aging committed one staff person for data management. One staff person in Transportation Demand Management also supported data quality control and the integration of GTFS feeds from the public transportation providers. One ARC IT staff provided part-time support for monitoring the technical support needed for the website.

System Implementation

Sequencing

Single window web-based Trip planning, Medical or other eligible subsidy, Type of assistance needed

Current Status

Non-functional: ARC decommissioned the site in 2022 due to financial constraints and outdated technology.

Plans for Expansion

ARC does not have plans for expansion

Detailed Funding Strategy and Mechanisms

The Atlanta Regional Commission SimplyGetThere.org site was funded through one-time federal innovation grants. The agency did not dedicate a funding source to support long -term operations and maintenance of the site.

Phase 1: Site Development funded through Federal Transit Administration's Veterans Transportation Community Living Initiative Round 1, \$419,855

Phase 2: Marketing and Community Outreach funded through FTA VTCLI Round 2, \$50,000

Phase 3: Ongoing reoccurring expenses indirectly funded through the Atlanta Regional Commission

Challenges and Opportunities

ARC connected the site to some key transit providers, such as the shuttle services and special service providers, but we were challenged by the providers needing to update the rides.

Originally someone in aging was keeping up the data manually but fell behind.

ARC did not allocate a specific line-item budget for any department to staff this site and maintain ongoing technology upgrades.

Collin County Transit (DART Run, McKinney, Texas)

Type of System	On demand, real time, door to door
Geographic Coverage	875 Square Miles of member cities in Collin County
Type of Clients Served	Transportation disadvantaged
Year of initial operation	2022
Legal status of Host Entity	Government
Annual rides served	60,000

Brief System Background

System host, institutions involved, system components, typical steps for a client, system evolution (say COVID impact, funding impact)

The DART RUN program was initiated in 2022, with CCart being a small nonprofit organization dedicated to providing services within the McKinney area. CCart had received funding under Section 5307 until 2013. Following that, TAPS took over services from 2013 to 2015 and successfully leveraged multiple financial resources. However, as they expanded their services, they encountered financial constraints, leading to suspending their operations in 2015.

The City of McKinney became a direct funding recipient as the Urban Transit District and re-launched transportation services through the DART Run program in 2022. Services address transportation needs of the transportation disadvantaged within an expansive coverage area spanning 875 square miles. This service primarily serves the urbanized region of McKinney but extends its reach to all of Collin County, encompassing both McKinney and its surrounding suburbs.

The member cities covered by this service include Celina, Lowry Crossing, McKinney, Melissa, Princeton, and Prosper, and it does not extend beyond the county boundaries. The transportation landscape in North Texas is characterized by a variety of transit options, each subject to distinct jurisdictional boundaries and eligibility criteria. As such, there is a concerted effort to minimize confusion and ensure a seamless experience for riders.

Collin County does not have access to rural funding, which means that individuals residing outside the member cities within Collin County do not have access to this transit service. The DART Run program's eligibility is limited to residents over 65, who have a federally designated disability, or who fall below the poverty line.

The DART Run program operates a call center with hours from 5 AM to 9 PM on weekdays and from 7 AM to 9 PM on weekends. The actual transportation services run from 6 AM to 8 PM on weekdays and

from 8 AM to 8 PM on weekends, ensuring that residents within the designated criteria can access essential transportation options within their community.

Needs Assessment

The city is revisiting its business plan and budget. This was not available at the time of the interview.

Institutional Structure

Executive and decision making

The Collin County Transit program provides rides to eligible riders residing in the McKinney Urban Transit District (MUTD) service areas. Administered by Dallas Area Rapid Transit (DART) Mobility Service, this program is made possible through a combination of funding sources.

Funding for the Collin County Transit includes the City of McKinney's Urbanized Area (UZA) designation, dedicated Federal Transit Administration (FTA) 5307 funds, State Department of Transportation (DOT) contributions matched at a 50/50 rate, and support from the City of McKinney's general funds. These resources collectively ensure the sustained operation of the program, enabling eligible riders to access essential transportation services within the MUTD service areas.

The service area covers the following cities within the McKinney Urban Transit District (MUTD) service area: Celina, Lowry Crossing, McKinney, Melissa, Princeton, and Prosper.

Operations management (backend)

The backend operational management of the DART Run program involves a complex but well-structured network of contracts and technology systems. The call center, automated IVR system, and one-click booking process ensure that client requests are handled efficiently, and the integration of multiple service providers, including Lyft, offers riders a variety of transportation options within a single platform.

SPARE Labs provides the call center services for the program. SPARE Labs has an internal call center with four agents to support riders. Approximately 80% of calls to the call center originate from Collin County. The call center utilizes an automated Interactive Voice Response (IVR) system and texting features. Riders can use the IVR system to perform tasks such as canceling a trip, booking a trip to recent addresses, and engaging with a live agent. After receiving travel training, some riders can use the IVR system for their requests. The call center operates 24/7, with specific booking hours bookending the service time, typically taking around 1 hour to process requests at the start and end of each service window.

The concept of one-click booking simplifies the process for riders and integrates with open fleets, including Lyft. Riders provide their address, travel date, and desired time. When they hit "save request," algorithms determine whether the request is best suited for a dedicated provider (Provider A or B) or a ride-sharing service like Lyft.

The contractual structure involves multiple entities:

- The City of McKinney contracts directly with DART for transportation services.
- DART, in turn, contracts with SPARE labs, which handles the technology and call center operations.
- SPARE labs, in collaboration with DART, contracts with various service providers.

Operations front-end: Drivers and contractors

The DART Run program manages three distinct fleets:

- Dedicated Providers: The City of McKinney owns three vehicles, and contractors operate them.
 The city oversees and manages these vehicles.
- Contractor Providers: These providers operate and independently maintain 4 vehicles.
- Partnership with Lyft: The program collaborates to enhance its service reach.

In the City of McKinney, three vehicles are owned by the city and operated by contractors. This fleet comprises city-owned and operated vehicles with Federal Transit Administration (FTA) funding. Importantly, all three vehicles in this fleet are wheelchair-accessible, ensuring accessibility for riders with mobility challenges. Another component of our shared ride service involves contracted providers who own and maintain their fleet, resulting in four vehicles operating during the week and two on weekends. This fleet comprises two vehicles with wheelchair accessibility features, expanding our capacity to serve riders with diverse needs.

This operations management strategy ensures that eligible riders have multiple avenues to access the DART Run program, facilitating their transportation needs effectively and efficiently while accommodating different preferences and circumstances.

Software and Technology

The DART Run program features a user-friendly mobile app, the Go Pass app, licensed through DART. The City of McKinney paid a \$200,000 license to use the Go Pass app for three years.

This app allows riders flexibility to schedule their rides with at least 2-hour notice and real-time.

It offers several scheduling options, including departure and arrival times, and specifies the need for a mobility device.

However, riders are encouraged to schedule their trips based on arrival time to ensure a seamless experience.

SPARE Labs provide the technology development for call center operations and IVR automation. The software used for this purpose is proprietary and called the "SPARE Platform." The GoPass app, which is used for booking rides, integrates seamlessly into this system. The system can work with ride-sharing services such as Lyft, Uber, and taxi companies using NTI software, allowing for efficient dispatching to vehicles.

Rides provided, and Nuances of Operations Management

Eligible riders initiate the process by accessing an online portal set up through the DART website. Approximately 90% of applications are submitted through this convenient online system. Applicants interface with DART to establish eligibility, where their qualifications are carefully reviewed against the program's criteria. Once eligibility is confirmed, DART proceeds with onboarding the new rider. A traditional paper application can be mailed to individuals without online access. The rider fills out the form, and the onboarding process continues through personalized assistance.

Riders who pass the eligibility check embark on onboarding, guided by DART personnel. During this phase, they become familiarized with the program's policies and procedures, ensuring they understand how to use the service effectively. Riders are then granted access to the booking system.

The DART Run program also offers the option of booking trips through the Go Pass app, officially sanctioned by DART. Riders can use the app to plan their trips, purchase tickets, activate them, and request rides. Approximately 2/3 of riders opt to book through the call center, while 1/3 prefer the app. Efforts are ongoing to increase app usage, including providing tutorials on its usage.

Riders have three options when booking trips:

- 1. Leave immediately (which may be challenging for those with mobility devices).
- 2. Specify a preferred departure time.
- 3. Specify a desired arrival time.

For trips with predetermined arrival times, CCT emphasizes that riders book the trip according to the specified arrival time, ensuring a seamless and efficient service.

The program operates a dedicated fleet, with a significant portion of vehicles being wheelchair accessible, for mobility access needs. To streamline the process, WAV (Wheelchair Accessible Vehicle) riders are encouraged to book through the call center due to the longer booking window, allowing for better coordination of accessible vehicles. App bookings have a more limited window, which could lead to issues with cancellations for WAV riders.

System Implementation

Sequencing

The DART RUN program started in 2022, and CCart was a small nonprofit that provides services to McKinney residents. CCart received 5307 funding until 2013. Then, the nonprofit TAPS led services from 2013-2015, and they did a good job leveraging funds but outgrew their financial capacity. TAPS suspended service in 2015. Then McKinney became a direct recipient and created the urban transit district.

Current Status

McKinney Urban Transit District funds the app and website. Dart cannot fund or operate vehicles in areas not part of Dart. Dart partners with Spare Labs, and SPARE Labs set up the technology and 3rd party contracts. The call center was open 24 hours but is now limited to operating close to operating times. Residents can now use the Go Pass App to book and pay for DART Run trips.

Plans for Expansion

DART Runs has a three-year contract to license the Go Pass APP. Expanding the Urbanized Area (UZA) boundary to include Frisco and smaller communities like Paloma has significant implications for the DART Run program. Frisco is now part of the UZA, but it straddles Denton and Collin Counties, each with its funding mechanisms and priorities.

The UZA expansion has resulted in funding sources being dispersed across different jurisdictions, leading to fragmentation in financial support.

Detailed Funding Strategy and Mechanisms

The primary funding source for the program is the Dedicated 5307 funding, which is used to support transit services.

The program does not compete for formula funds but relies on a 50/50 match funding approach.

The match funding is sourced from both local funds and TXDOT formula funding.

The annual budget for the program is \$2 million, increasing to \$2.3 million in 2024.

The cost per rider varies depending on the type of service:

- Dedicated fleet: \$72 per passenger
- Dedicated minivans (WAV): \$32 per passenger
- Lyft (Ride-Sharing Service): \$16 per passenger

There is a fixed fee for riders, which is \$3.15 for those within the service area and \$5.00 for those outside the area.

Ridership eligibility is limited to specific categories, including residents 65 and older, individuals with federally listed disabilities, or those with an income at or below 150% of the Federal Poverty Level (FPL).

This eligibility allows the program to utilize federal funds to help subsidize transportation services for these qualified individuals.

Challenges and Opportunities

The program faces challenges related to funding sources and political boundaries.

Gaps in available rides may occur due to the complexities of political boundaries and the service area covered by multiple Metropolitan Planning Organizations (MPOs).

MPOs often cover specific areas based on political motivations, which can sometimes hinder the efficient and effective delivery of transit services.

Dane County Transportation Call Center, Dane County, WI

Type of System	
Geographic Coverage	Dane County Wisconsin
Type of Clients Served	All Residents
Year of initial operation	2008
Legal status of Host Entity	County Government
Annual Call Volume	10,000

Brief System Background

Dane County is the system host for the county's Transportation Call Center. The City of Madison, the state Capitol, and 2nd largest city in Wisconsin, is in Dane County. The county population is over 500,000, with approximately 78% White, 6% African American, 7% Asian, 7% Hispanic, and 2% other. In the community, 15% of the population is aged 65 years and older. The county covers 1,236 square miles.

According to the most recent Human Services Coordinated Transportation Plan (cite), the City of Madison, the County, other cities, and private providers offer various transportation options to meet the community's needs, including older adults, low-income, and people with disabilities. Public transit providers include:

- Metro Transit Fixed Route primary transit provider for the City of Madison, operating within the oversight of the mayor and other official committees.
- Metro Paratransit On-demand responsive, advance reservation services for people unable to use the Metro fixed route service as required by the Americans with Disabilities Act. Paratransit riders must meet eligibility requirements and pay paratransit fares.
- City of Moona Transit is a contracted transit company offering peak-only commuter service and mid-day routes. Seniors and people with disabilities receive a discounted fare.
- City of Stoughton Public Transit contracted subsidized shared taxi service with a fleet of 4
 vehicles for trips within city limits or trip origin within city limits. The service is wheelchair
 accessible.
- City of Sun Prairie Shared-Ride Taxi contracted service for trips within the city limits and service to a stop to access the Madison Metro Transit service.
- Aging and Disability Resource Center County program that provides contracted ride services to eligible participants.

Dane County Specialized Transportation Services – Dane County Department of Human Services
Adult Community Services Division administers transportation services to older people, people
with disabilities, veterans, refugees, low-income families, and others. The County contracts with
nonprofit and private service providers for subsidized riders.

Launched in 2008, Dane County operates the One-Call Transportation Call Center with the assistance of a mobility manager. When a resident calls the center to reserve a ride, the intake process will screen them for eligibility, level of need, and trip type. The call center attempts to help the resident receive the most cost-effective option for a medical trip (95% of all trip requests) if feasible, including the following options:

- Route the resident back to a fixed route option, paratransit, and then the Veteran's or RSVP Volunteer Driver programs,
- Route the resident to the statewide broker if the resident is on Medicaid, and the trip is medical; or when these are not an option, and
- Schedule a subsidized ride with a county-contracted rider provider.

The County contracts with various providers for medical and nonmedical trips (5% of all trip requests). Senior Services and the Senior Centers offer trips to the centers, and schedule focused weekly trips for shopping and recreation—the County contracts with the YWCA for employment-related transportation and Madison's Metro to provide subsidized bus passes for eligible residents searching for work or starting new employment.

Initial funding for the call center development and staff capacity was provided through State's funding for Elderly and Disabled Transportation (85-21). Federal Transit Section 5310 funds are used to support mobility management efforts.

Needs Assessment

According to the HST Plan, The County has limited federal and state funding to provide affordable and accessible transportation. Many residents have limited to the Madison Metro fixed route service or the ¾ mile buffer for Metro Paratransit. Transportation disadvantaged relies on specialized transportation services. Critical needs include:

- Most specialized service providers require reservations with limited options for short-notice trips.
- Providers are limited in the number of wheelchair-accessible vehicles that operate in the County.
- Metro fixed-route transit is the only provider with real-time travel technology.
- Service providers are limited in using technology for fare collection and online trip planning.
- The number of private taxi companies operating in Dane County has reduced from four to two companies.

Institutional Structure

Executive and decision making

The One-Stop Transportation Call Center falls under the Dane County government's legal responsibility, which ensures accessible transportation services to its residents. The county funds the call center in collaboration with the state and federal allocations. The call center background checks and contracts directly with all providers of transportation operating within the network.

Operations management (backend)

When individuals, primarily the transportation disadvantaged, contact Dane County for medical transportation, the process involves carefully evaluating the most cost-effective and suitable option. Here is an overview of the steps in the trip booking process:

The first step is assessing the caller's medical transportation needs. This assessment helps in determining the most appropriate transportation solution.

- Dane County explores various volunteer programs to meet the caller's needs. These may include:
 - o **Voucher Volunteer Driver Program:** If the caller's needs align with this program, it is considered as a potential transportation solution.
 - Veterans RSVP: The Veterans RSVP program is explored as an option for eligible individuals.
 - Specific Volunteer Organizations: Dane County may have specific volunteer organizations tailored to certain geographic areas based on school districts, which can be considered if applicable.
- If paratransit or shared-ride taxi services are available and suitable for the caller's requirements, these options are explored as potential transportation choices.
- If none of those options work out, Dane County sets up a ride directly for the caller.
- If none of the previous options are feasible, Dane County considers using taxis in Madison or transportation services provided by medical facilities. The availability of Medicaid is checked at this stage to determine eligibility for using the statewide broker.
- Most rides arranged by Dane County are door-to-door, ensuring convenience and accessibility
 for passengers. The caller's use of mobility aids is also considered during this process, which may
 impact the choice of transportation.
- While some ride requests may go unmet, Dane County strives to reschedule these rides for another day, ensuring that individuals receive the necessary transportation assistance.
- It is important to note that rides involving individuals who require wheelchairs pose unique challenges due to the need for specialized transportation equipment and accessibility considerations. These cases may require additional coordination and resources to ensure safe and efficient transportation.

Payment:

 When connecting someone with a volunteer driver program, such as RSVP, the arrangement is typically based on a donation basis. • If the ride is set up directly, the passenger pays for the ride. Dane County limits individuals to 2 round trips per month to manage the budget effectively and distribute assistance to more people in need.

Operations front-end: Drivers and contractors

Dane County contracts with providers for transportation services. The One Stop Transportation Call Center is an information and referral resource that redirects callers, based on need, to transit, paratransit, nonprofit volunteer driver programs, and private providers to book their ride with a provider directly. The County schedules a subsidized ride with a contracted provider if a caller cannot utilize these other options. The county negotiates a rate with each provider.

Software and Technology

The Dane County Transportation call center uses a software program to record calls from the one-call system. The recordings are an important reference for what is talked about with the caller. The call center also uses a custom solution software called Mobility Manager, created by a local coding cooperative to log ride requests and track data to pay bills. The software does not allow any flexibility in design and functionality updates. Any desired changes to the current software will require the county to purchase or develop a new software platform.

Rides provided, and Nuances of Operations Management

The Call Center utilizes its software systems, which do not allow the call center or individual riders to make direct bookings. Currently, the Call Center operates with a limited staff consisting of a mobility manager and one call center operator. The small team manages the high volume of calls and requests, which can sometimes be overwhelming.

Among the providers, Metro Transit only offers real-time travel data and online payment systems. This capability provides riders with up-to-date information on bus schedules and enables convenient payment options. However, the availability of such features is limited to Metro Transit, while other providers may offer different services. Currently, the county is not leading any effort to coordinate with providers to participate on a single platform (one click).

There is a limit of two round trips per month for riders. This restriction prevents excessive usage and allows more individuals to access transportation services.

System Implementation

Sequencing

The County serves as a call center only and provides information and referrals about available transportation options. It also books rides to eligible riders through a contracted network of providers, including RSVP volunteer drivers.

Current Status

The One-Stop Transportation Call Center operates a fully functional system where individuals can request a ride by contacting the call center. It covers the process of ride requests, scheduled rides through contracted providers, software implementation for call recording, and the utilization of custom payment management software.

Plans for Expansion

The One Stop Call Center was created in 2008, and currently, there are no plans to expand the call center operations. The County is considering different grant opportunities to incentivize the expansion of taxi services and the purchase of accessible vehicles.

Detailed Funding Strategy and Mechanisms

The Dane County Transportation Call Center relies on grants and programs targeting specific groups, coordination efforts, contracted services, and county, state, and federal government assistance.

Rural Access Transportation (60+): provides significant funding of \$480,000 to support transportation services for individuals aged 60 and above in rural areas. This funding ensures that older adults in these areas can access reliable transportation options, enabling them to meet their mobility needs.

Community Access Individual: The program allocates \$135,000 to enhance transportation accessibility for individuals with specific needs. This funding addresses the unique transportation challenges individuals face requiring specialized support and assistance.

Volunteer Driver RSVP: This program contributes \$587,000 to support the recruitment, training, and coordination of volunteer drivers, expanding the availability of transportation options for the community.

Urban Paratransit Coordination: program provides \$268,000 in funding. This initiative focuses on streamlining transportation services for individuals with disabilities and older adults, promoting accessibility and inclusivity.

Senior Diversity Program (Contracted Taxis and Vans): The program receives \$32,000 in funding utilizing contracted taxis and vans. This program addresses the diverse transportation needs of seniors, offering flexible options that can be tailored to their specific requirements.

Mobility Management Call Center Staff: \$140,000 is allocated to support the staff responsible for mobility management.

Government Assistance: The County Elderly and Disabled Transportation Assistance program, governed by state legislation (85.21), provides funding to support transportation services specifically for "elderly and disabled individuals" in the county. Additionally, the call center receives Federal Transit Administration (FTA) formula funding, contributing to its overall operational budget. County funding is also allocated to ensure the sustainability and continuity of the OSTCC's services.

The One Stop Transportation Call Center in Dane County faces challenges related to the availability of private providers and the need for enhanced accessibility. Dane County and the City of Madison have recognized the importance of accessible transportation initiatives and are considering a grant program to encourage private providers to acquire accessible vehicles. The number of taxi companies has also decreased from four to two.

One key challenge the Call Center faces is ensuring that other service providers, including senior centers, know its services. Establishing effective communication channels and providing comprehensive information about the call center can help generate referrals from these organizations, ensuring more older people receive necessary transportation support.

There have been previous efforts to market the call center to the community, but specific initiatives are limited. The pandemic and the closure of alternative transportation options overwhelmed the call center, making it difficult to handle the high volume of requests. The call center only employs two full-time staff, making it challenging to support a high call volume.

The current Call Center is functional, but it could be further improved, enabling individuals to use a centralized web-based system to book rides directly. Implementing this would require software integration across all service providers, posing a significant financial challenge for the County. The current dedicated funding sources are limited.

Rural counties often face limited transportation options, leading to significant gaps in services. Many individuals in our rural communities lack viable transportation options altogether.

FACTS: San Diego, CA

Type of System	Call Center, Brokerage
Geographic Coverage	San Diego County
Type of Clients Served	Transportation disadvantaged
Year of initial operation	2005
Legal status of Host Entity	Nonprofit; quasi-governmental (designated Consolidated Transportation Services Agency as appointed by SANDAG (MPO/COG)
Number of Rides/Annual	300 round trips per day; 30 round trips to the public (7,830 annually), 270 to contracted medical services (70,470 annually)

Brief System Background

FACT initiated its program with regional and state funding in 2005 and was incorporated in 2006. FACT supports riders outside ADA paratransit service areas, those not eligible for ADA Paratransit services, and those who need help to afford for-profit services. It provides transportation in communities where other local and regional services are unavailable or unable to accommodate a person's mobility needs.

FACT is the Consolidated Transportation Services Agency appointed by SANDAG (MPO/COG) FACT services as a:

- One-call dispatch service & call center;
- Transportation brokerage for non-profit and social services transportation; and
- Designated Mobility Manager for San Diego County.

FACT negotiates the ride price and invoices for contracted rides with over 10 transportation providers as a brokerage system. The system provides approximately 30 daily rides for the public and 270 rides to contracted medical services. FACT does not own any dedicated vehicles.

The FACT website has always offered the public a ride-find tool where users can input their origin and destination to see a list of referrals, but the system has never been able to schedule rides on the website. FACT received funding from the State of California's Access for All tax to purchase real-time software, Ecolane, and tables to dedicate 5 vehicles for on-demand real-time response. FACT can dispatch real-time rides to these vehicles. For other trips, FACT will continue to provide scheduled rides.

Needs Assessment

Community leadership began raising awareness of the transportation needs of older adults and persons with disabilities not easily served by San Diego public transportation options. A core group of individuals working for area transit agencies and community representatives created Full Access and Coordinated Transportation, a non-profit mobility management center (FACT), a nonprofit entity authorized through state legislation to:

- Create awareness of needs outside of the current service area,
- Develop a system that would fill holes and gaps in the public transportation service area and
- Provide transportation service to anyone without any other options.

The San Diego Human Services Transportation Plan also highlighted:

- Introducing new ride-scheduling, dispatching, or fare-payment technologies can pose challenges
 for seniors, particularly those unfamiliar with digital tools. Senior riders may prefer traditional
 requests for trips, such as making phone calls to the provider.
- Seniors 65 and older with physical, cognitive, or sensory limitations may face difficulties when using public transit for daily travel.
- Travel training programs can empower seniors to confidently use transit services, addressing the learning and navigation challenges they may encounter.
- Transit services for individuals with disabilities require level boarding, ramp, or lift access, priority seating, and accommodations for service animals and mobility devices.
- Transit operators should undergo sensitivity training to ensure respectful interactions with individuals with disabilities, including those with cognitive or behavioral disabilities.

- Visual impairments require audio announcements at transit stops and vehicles, necessitating clear and consistent automated audio announcements that can be geo-referenced and provided in multiple languages.
- Tactile navigational features and technology like radio-frequency identification or Bluetooth transmitters should be incorporated into transit stations to assist the blind and visually impaired.
- Specialized transportation for disabled individuals should address mobility devices, service animals, ride scheduling assistance, sensitivity to long waits, and adverse weather conditions.
- Low-income individuals often work non-traditional schedules, requiring transportation options during late nights, early mornings, or weekends.
- Language barriers affect Limited English Proficiency (LEP) individuals accessing transportation, necessitating transit information in multiple languages and language assistance measures such as translation and interpretation services.
- Paratransit services offer accessible door-to-door transportation within ¾ mile of fixed-route transit. Still, they can be cost-prohibitive for low-income seniors and may not fully meet their unique needs.
- Specialized transportation programs by nonprofit organizations or local government agencies
 often provide more affordable services, including door-to-door or door-through-door assistance,
 for older adults requiring extra support.

Institutional Structure

Executive and decision making

FACT was the designated Coordinated Transportation Services Agency (CTSA) for San Diego County by SANDAG. CTSAs are mandated by California State law to coordinate and consolidate human services transportation. As the designated mobility manager for the San Diego region, the organization must foster coordination among transportation providers and provide free information, referral, and transportation services. The designation of CTSA by SANDAG provides a token amount of annual funding. The designation, however, carries the weight and allows FACT to leverage other federal, state, and local resources and support. The governance structure includes:

- Non-profit incorporation;
- Board of Directors chaired by the county supervisor and elected officials;
- Two advisory committees; and
- Executive Director.

FACTS employs 4 full-time coordinators and a Safety Compliance officer.

Operations management (backend)

FACTS dispatches rides to contracted vehicles. Non-emergency medical accounts for almost 70% of daily rides. FACTS negotiates fee for services with medical contract providers. Flow over and weekend calls route to Jewish Family Services.

Operations front-end: Drivers and contractors

Vans for wheelchair access, Cars for ambulatory. All drivers are on contract.

Software and Technology

FACT uses the software Ecolane to dispatch rides to contract providers. Vendors continue using their software platforms for dispatching, tracking, and payment systems. Ecolane is developing a new platform allowing FACTS to dispatch real-time rides to five dedicated vehicles on-demand.

In partnership with their regional United Way 211 program, FACTS received an original Veteran's Transportation Community Living grant for technology development. The 211 system developed a Community Information Exchange allowing 211 and contracted partners to upload and download client information. FACTS is working with 211 to test how to track and respond to transportation referrals.

FACTS does not collect ride data on any caller referred to another system.

FACTS is currently applying for grant funding to expand its technology to develop an Ecolane APP allowing individuals to register through the APP as a RideFACT rider. FACT will still take the lead in verifying rider details and activating each profile.

Rides provided, and Nuances of Operations Management

Capture open-ended special details of different systems and how they are managed and run.

System Implementation

Sequencing

Phase 1: Started as a call center

Phase 2: Web application for finding transportation providers using origins and destinations and information referrals

Phase 3: 211 integration - Community Information Exchange funded by VTCLI. Sharing client information with entities in CIE.

Current Status

Phase 4: Access for All State of California Grant for real-time on demand scheduling with 5 dedicated vehicles

Plans for Expansion

Web application no longer active. But the app is going to launch by the end of the year. The app will allow people to register as a ride FACT rider

Detailed Funding Strategy and Mechanisms

FACTS relies on three different funding sources, all of which are programmed through the MPO:

- Federal Transit 5310 Enhanced Mobility for Seniors and Individuals with Disabilities and the city of San Diego's local match
- Access for All 1-time grant funding allocated in July of 2023
- Transportation Development Act state formula funding of approximately \$200,000 based on the designated Coordinated Transportation Services Agency (CTSA) for San Diego County by SANDAG

FACTS generates another substantial portion of its budget through revenues from fee-for-services contracts with transportation providers and applies for other grant opportunities.

Challenges and Opportunities

Dedicated Funding: Securing dedicated funding is crucial for the success of the 1c1c system. Without it, the center faces difficulties in obtaining grant funding to support its operations effectively. The lack of consistent financial support hampers the center's ability to plan and implement long-term initiatives.

5310 Funding Competition: The 1c1c system must compete for 5310 funding every two years. Having an off-the-top allocation for one call center would be advantageous, which would provide a reliable and consistent funding source. Overcoming the unpredictable nature of the funding process would allow the center to focus on its core mission without the added burden of competing for funding repeatedly.

Leadership and Champion: One of the challenging factors for the 1c1c system is the need for strong leadership and a dedicated champion. Having someone who advocates for the cause and prioritizes its importance can help garner support and facilitate collaboration among various stakeholders. Effective leadership is essential for achieving the center's goals and maintaining sustained progress.

Coordination, Support, and Partnerships: To thrive, the 1c1c system requires coordination, support, and partnerships. Building collaborative relationships with transportation providers, local authorities, and community organizations is crucial. These partnerships can create sustainable funding opportunities, especially when initiatives like saving transit system funding on every trip become mutually beneficial. However, establishing such partnerships requires time, effort, and a foundation of mutual trust.

Sustainable Funding: Ensuring sustainable funding is an ongoing challenge for the 1c1c system. While partnerships and grant funding can provide temporary support, a long-term, consistent funding source is necessary for the center's stability and growth. Exploring options for sustainable funding streams that align with the center's objectives and enable it to meet the community's evolving transportation needs is essential.

Marketing: Limited and sporadic funding for marketing poses a significant hurdle for the 1c1c system. With only a two-year cycle, the center's marketing efforts are often restricted and low-key. Marketing activities are typically intensified only when a decline in demand is observed. However, introducing the new AFA service brought a larger marketing and operating budget for the real-time on-demand project,

with \$50,000 allocated to promote the services. Nonetheless, concerns arise regarding the sustainability of the service if consistent demand is generated, as the grant funding for marketing is limited to one year.

Find a Ride, Puget Sound, WA

Type of System	Web based information system with multiple agency users
Geographic Coverage	King, Snohomish, and Pierce Counties WA
Type of Clients Served	Transportation disadvantaged
Year of initial operation	2013
Legal status of Host Entity	Non-profit

Brief System Background

Hopelink, a non-profit human service organization, hosts the Find a Ride system serving King, Snohomish, and Pierce Counties in Washington State. Find a Ride is an online resource for transportation services in the central Puget Sound region. Transportation options include public transit, special needs transportation, and community shuttles. The site was created and managed by Sound Transit until 2015 and is now a service of Hopelink. Hopelink Transportation also includes the following three programs:

- DART Transit using minibuses in King County through a contract with King County Metro,
- Brokerage for Non-Emergency Medical Transportation covered by Medicaid in King and Snohomish Counties, and
- As the assigned Mobility Management agency, it provides education and resources through three travel training programs in King County: Travel Ambassadors, Public Transit Orientation, and Getting Around Puget Sound (GAPS).

In addition, Hopelink provides trip coordination and promotion for the Community Van through a contract with King County Metro and hosts VetsGO a system designed to serve as a single web destination for veterans, service members, and their families to access the available transportation options in King County, Washington, and the adjoining counties in the central Puget Sound region.

Needs Assessment

The Inclusive Planning Grant from the Administration for Community Living and the Community Transportation Association of America required the King County Mobility Coalition to prioritize extensive public outreach to diverse populations. As a condition of the grant, the King County Mobility Coalition carried out a six-month engagement process from June to December 2018. During this time, KCMC collected feedback from over 580 individuals through:

- Two Mobility for All Summits. These summits followed the <u>World Café</u> methodology, where
 participants engaged in several small roundtable discussions about their transportation
 experiences and needs.
- Four listening sessions hosted at non-profit organizations serving rural communities, people
 with disabilities, people with mental illness, people experiencing homelessness, and Latinx and
 immigrant communities.
- A survey in which 54% of respondents were aged 65 and over, 13% were caregivers, and 30% were people with disabilities. [3]

Hopelink and the King County Mobility Coalition received additional funding and formed an Inclusive Planning Grant Steering Committee that lasted from April 2019 to January 2020. Through the Inclusive Planning Grant process, the King County Mobility Coalition determined it necessary to pursue the creation of a new One-Call/One-Click system

Institutional Structure

Hopelink is a multisectoral nonprofit that provides a wide range of services, including transportation for the transportation disadvantaged. The organization has an elite board including past mayors and state representatives.

The staff serving the one-call one-click system include:

- Customer service rep (1 FTE),
- Project manager (0.5 FTE),
- Network system support (0.25 FTE),
- Data standardization manager (0.25 FTE),
- Executive director (0.5 FTE)

Software and Technology

The current system includes a standing-up OpenTripPlanner instance with a One-Click overlay to denote eligibility-restricted transportation options. The system uses GTFS and GTFS-flex feeds.

Rides provided, and Nuances of Operations Management

Throughout 2021, Hopelink continued to ensure access to transportation services, collaborating with small business partners and continually monitoring and modifying coronavirus protocols to ensure safety. They served over 37,000 clients with Medicaid transportation and provided more than 428,000 DART (Dial-A-RideTransportation) rides. Hopelink's Mobility Management program helped 1,300 clients with transportation planning resources.

System Implementation

The One-Call/One Click system under Hopelink has yet to come into fruition, but plans exist for how it can serve its users and the Seattle metropolitan area more broadly. The following is a system road map prepared in 2023 with an optimistic funding scenario.

Current Phase 1A (2023): Service Discovery & Trip Planning

Providing riders and their assistors with everything they need to know about the full spectrum of transportation services and programs in King, Pierce, and Snohomish Counties.

Main technical effort:

- Standing up OpenTripPlanner instance with a One-Click overlay to denote eligibility-restricted transportation options.
- User interface that goes beyond ADA standards.
- Creation and maintenance of GTFS and GTFS-flex feeds.

Main institutional effort:

- Creation and maintenance of a network that includes as many providers as possible.
- Creation and maintenance of the "one-call" portion of the system (call center capabilities).
- Collaboration with other agencies in the region for shared OpenTripPlanner resources and processes to ensure consistent and high-quality trip planning across the entire network.

Phase 1B: Rider Profiles

Future phase for portable or standards-based profiles that could be used with other apps or services

Provides a rider travel profile with the option to be shared by riders across providers. The travel profile contains riders' travel preferences, mobility factors, common destinations, and service eligibility. Profiles would be available to riders and their authorized assistors.

Possible project directions:

- Continue to convene regional partners to develop a regional strategy for developing rider profiles across agencies.
- 2. Collaboration with regional transit agencies to assess the effectiveness of shared "OTP middleware" for use in future phases.
- 3. Collaboration and integration with new ORCA, by a single-sign-on scheme

Phase 2: Intake, Eligibility Determination, and Enrolment Verification

Offers transportation providers an easy and centralized way to establish which riders can use a service or fare not available to the general public. The determinations would then be stored in rider profiles. The design work for this system element is at an early stage.

Possible project directions:

- 1. Convene regional partners to assess the level of interest and requirements for how such a system would work for as many providers as possible.
- 2. Develop data security requirements and opportunities for data sharing that would result in an enhanced rider experience or greater operational efficiencies.

- 3. Intake and eligibility determinations are made separately by each transportation provider. Enrolment information could be entered into the OC/OC system's rider profile by the transportation provider or the rider.
- 4. The OC/OC system could provide a centralized tool for transportation providers to carry out their intake and eligibility determination processes. Passing enrolment information to the rider profile could be a single click after a determination. King County Metro (e.g., Access or reduced fare programs) could be an early adopter of such a system.

Phase 3: Integration of AccessMap trip planner

AccessMap was developed by the Taskar Center at the University of Washington, to provide pedestrian travel plans. It may be possible to integrate it with OpenTripPlanner for the pedestrian portion of trip itineraries.

Phase 4: Trip Brokering

Note: In the transportation field, the process of assigning trip requests to a selected transportation provider is referred to as "brokering." This term has become strongly associated with Medicaid, but in this case does not involve Medicaid-funded trips.

Provides a mechanism where rider trip requests can be made to a central hub (the OC/OC system or its associated call center), assigned by the hub to a transportation provider, and then fulfilled by that provider.

Possible project directions:

- 1. Carry out periodic inquiries into the national landscape for similar tools in development that may be usable in the Puget Sound region. For example: projects in Minnesota, Iowa, Ohio, and elsewhere.
- 2. Begin with a trip request management system that relies on an intake form and emails to communicate with providers. Use this less efficient system to test the feasibility and work out kinks, then develop a more automated system as time and resources allow.
- 3. Apply for a federal transit grant to build the software to automate and scale.

Provides one or more streamlined platforms to facilitate billing and payments between providers and payers to reduce the currently highly manual and one-off nature of third-party payment for riders' transportation services. For example, a health clinic may wish to provide incentives for a vaccine campaign and may be able to pay for its patients to use a given transportation service via a promotion code or similar mechanism. Key questions:

- What organizations would most benefit from the introduction of such systems? What payers? What transportation providers?
- Are there similar systems in other fields that can be used as models?
- How tightly integrated should such a system be with the systems dedicated to brokering trips?
- Is a "wallet" system (where the rider has visibility into their resources and can use them across multiple providers at their initiation) worth pursuing, or should the focus be on payer-initiated services across multiple providers? Or both?

Possible project directions:

- 1. It may be possible to provide some limited wallet functionality on mobile devices using app-to-app "deep linking," wherein an OC/OC app could have some limited access to some of the functionalities of an ORCA app.
- 2. The new ORCA project has included in its roadmap (phase 3, 2024-2026) the ability for users to grant 3rd parties access to their digital wallets (greater access than with deep linking, described above). The OC/OC system could use this type of access in some scenarios.
- 3. Develop or procure a system separate from ORCA that is more focused on specialized services, the needs of 3rd-party payers, and state-wide useability. Such a system could allow balance transfers between participating (non-ORCA) organizations.
- 4. SoundTransit's Digital Assistant will include a fixed route fare calculator that the OC/OC system could leverage, though it does not currently include calculations for specialized services.

Detailed Funding Strategy and Mechanisms

Hopelink and the King County Mobility Coalition are supporting the One-Call/One-Click project with the following funding sources:

- 1. \$105,000 for an Inclusive Planning Grant from the <u>Federal Administration for Community Living</u>. This grant was awarded in two rounds: \$35,000 in the first cycle and \$70,000 in the second cycle.
- \$148,063 consolidated grant plus a \$101,936 supplemental award from the <u>Washington State</u>
 <u>Department of Transportation</u>. The consolidated grant is sourced through Section 5310–
 Enhanced Mobility of Seniors & Individuals with Disabilities.

Challenges and Opportunities

One of the biggest challenges is consistent funding for its services and expansion plans. They applied twice for federal grants, but the state recommended another project. They get a small amount from the state government. The web service has been unreliable and inconsistent due to insufficient funding. During the interview, the respondent mentioned that they had a site set up ten years ago, but it became defunct because they could not pay their vendor to maintain it. The WA transit agency revamped the website recently.

GO Vermont, VT

Type of System	1 Call 1 Click Trip Information System
Geographic Coverage	A state-wide system that includes 7 regional transit agencies
Type of Clients Served	All populations
Year of initial operation	2008
Legal status of Host Entity	Government

Brief System Background

Go Vermont is an integrated transportation program of the Vermont Agency of Transportation (VTrans). It enables people in the state to access various travel options to reduce their travel costs and environmental impact. It provides a comprehensive trip planner interface with opportunities for car sharing, bike sharing, public transit, and parking options.

For transportation disadvantaged, Go Vermont Older Adults and Persons with Disabilities Mobility Program provides Trip Assist, a location-based travel information system. Vermont's public transit providers serve as regional transportation brokers and work with human service agency partners to coordinate transportation disadvantaged trips together with Non-Emergency Medical Transportation (NEMT) provided through Medicaid, contracted service with community organizations and institutions, and transportation for the public. Eligible clients are helped directly through their dial-a-ride service or can call their regional transportation agency's dial-a-ride service. They are provided with paratransit and public transit options or contact information of the nearest trip provider.

At present considerable COVID recovery funding makes it possible to provide free trips for most transit and paratransit rides. However, cutting back on funding could impact fixed-route services and some ondemand transportation, requiring Vtrans and the other regional agencies to rationalize and optimize routes.

Needs Assessment

Inventory and detail of community needs, business planning or HST

The VTrans Human Service Transportation Coordination Plan, last updated in 2014, provides some of the details of community needs in the state. Using ACS 2012 data, the report identifies the spatial distribution of transportation disadvantaged by census block group. In addition, the report also identifies the spatial distributions of Medicaid recipients and residents below the federal poverty line. The report then compares these distributions with transit usage and vehicle ownership to determine gaps and issues. Policy proposals identify transportation disadvantaged groups requiring transportation assistance. These groups include critical care E&D funding, people who are blind and deaf, substance abuse withdrawal program participants, and employment re-entry & vocational rehab participants. While potential ride options and the number of rides provided by human service providers in rural areas are included in the document, it does not quantify gaps between ridership demand and supply.

Institutional Structure

Executive and decision making

For the Go Vermont system, VTrans works closely with the Vermont Public Transit Association (VPTA), an organization of the 7 regional public transit agencies. VPTA is also the NEMT contractor for the state. Each regional transit agency executes MoUs with local non-profit and other transit providers.

The state's public transit standing committee meets every month. The state also has a public transit council consisting of the legislature, members of the public, and regional and state transit agencies. The council meets four times a year. In addition, there are E&D standing committees in each region of the

state that periodically assess demand and travel needs. The MPO Planning Agency at the state level provides oversight for the local E&D committees.

Operations management (backend)

Noteworthy backend operations management strategies include commissioning Trillion Transit to ensure the transportation information feeds are up to date. The agency is paid \$40,000 per year. See section on software and technology for backend technology systems.

Operations front-end: Drivers and contractors

The Vtrans through the Go Vermont program does not offer any rides—the 7 regional public transit agencies contract with drivers and ride service providers for the system. Vtrans provides oversight for these local arrangements.

Software and Technology

The Go Vermont trip planner software is an open-source platform that integrates GTFS and GTFS flex feeds from different transportation providers. Agile Mile is the organization that set up this software system.

Rides provided, and Nuances of Operations Management

The Dial-a-ride calls get transferred to regional public transit agencies based on location data. These 7 agencies then use their own scheduling and booking software to provide rides.

Through the Go Vermont information system and with the 7 regional transit agencies, Vtrans provides about 100,000 trips per month. About 1% of these trips, or about 100 trips, are missed or canceled because of the lack of drivers or issues of coordination.

NEMT rides booked through the regional PTAs have requirements like 5310 funding. The rides are typically booked 48 hours in advance, although rides may be available with 24-hour notice. The vehicle fleet is mixed from sedans to sprinters and can accommodate shared rides along with wheelchair clients.

System Implementation

Sequencing and status

The Go Vermont system was conceived as a trip information and trip planning system only. The state-level system does not plan to integrate booking or payment. It is fully operational now.

Plans for Expansion

VTrans has started five micro transit pilots in the state for on-demand rides. These trips are delivered through private sub-contracts. Regional transit agencies have apps integrated into their websites to book rides. The vendor for software customization is Route Match, the software HTFS Q ride will schedule and dispatch rides.

Detailed Funding Strategy and Mechanisms

The Go Vermont program has an annual budget of \$900,000. This is a small part of the overall state public transportation budget of \$40mn. \$20mn funding comes from the Federal Transportation Authority (FTA) and \$20mn comes from the Congestion Mitigation and Air Quality (CMAQ) improvement program flexed from the Federal Highway Administration (FHWA). This is supplemented by about \$400,000 from the federal Section 5310 funding for Enhanced Mobility of Seniors and Individuals with Disabilities.

Local transit agencies bring in 20 percent local match for state and federal funding. A variety of sources exist. Schools and larger businesses pay for bus passes. Municipal and philanthropic funding may also be available and varied. The micro-transit pilots are funded by 5311 funds.

Challenges and Opportunities

Vermont continues to be fare-free since the COVID-19 pandemic, but fares are returning since post-Covid measures and funding are tapering off. Covid caused a decline in ridership and the departure of many volunteers. Vermont is currently focusing on bringing back community drivers and recruitment of volunteer drivers. Since funding is tapering off, the agency is evaluating the performance of different routes and may remove services in underperforming routes.

Appendix B: Funding Options for Mobility Management

The various case studies show that implementing 1 call 1 click systems for coordinating demand responsive transportation for transportation disadvantaged groups is cost intensive. Therefore, we first examine the range of funding streams available in the past ten years. These are combinations of one-time innovation grants and recurring funding sources. Typically, one-time grants are used for capital expansion and system augmentation through integration of technology. Recurring grants are the key sources of operations and maintenance. As is discussed in the findings section, access to partial or full funding through various sources can influence the viability and efficiency of 1C1C systems. Various federal funding sources have been granted for the innovation of mobility projects to enhance transportation options and services for transportation disadvantaged.

Mobility for All Projects:

This initiative focuses on improving accessibility and mobility options for all individuals, including those with disabilities.

Accelerating Innovative Mobility (AIM) Projects (Current and Competitive)1:

AIM Projects promote innovative technologies and services to address mobility challenges. AIM project outcomes seek to enhance transit financing, planning, design, and service. Equitable accessibility is a grant program priority.

AIM's goals include:

- 1. Discovering, testing, and validating novel approaches, technologies, and services.
- 2. Promoting top mobility innovations applicable through FTA's capital programs.
- 3. Creating a nationwide network of transit stakeholders embracing innovative methods to enhance mobility.

Primary AIM objectives:

- 1. Incentivize transit technologies, practices, and solutions for U.S. public transportation.
- 2. Harness private sector investments to benefit transit.
- 3. Expand interoperability of inventive technologies across systems and modes.
- 4. Disseminate results of innovative mobility solutions to the transit industry and stakeholders.

Eligible Activities:

¹ Accelerating Innovative Mobility | FTA (dot.gov)

Authorized projects must encompass all actions essential for pioneering mobility innovation. This includes formulating business models, securing equipment and services, creating software and hardware interfaces, operating new service models, and assessing project outcomes.

Eligible Recipients:

Qualified recipients include public transportation providers like agencies, government DOTs at state/local levels, and federally recognized Indian tribes. Applicants can designate strategic project partners with significant involvement.

Eligible Project Partners under AIM:

Applicable partners include:

- For-profit and non-profit entities, including shared-use mobility providers, technology suppliers, automated vehicle tech providers, property managers, and others.
- Private transport service operators (e.g., employee shuttles, airport connectors, university systems).
- Public transportation operators (agencies, government DOTs, tribes).
- Vehicle manufacturers or suppliers.
- Financial institutions.
- State/local government bodies, multi-jurisdictional setups, Metropolitan Planning Organizations.
- Research consortia, non-profit industry bodies, higher education institutions, and more.

Inclusive Mobility on Demand Grants: Transportation Planning for All (Competitive and Current)²

The Transit Planning 4 All initiative, sponsored by the Administration for Community Living (ACL) in partnership with the Department of Transportation's Federal Transit Administration (FTA), aims to illustrate the advantages of inclusive approaches in community transportation projects.

This collaboration involves the US Department of Health and Human Services Administration for Community Living (ACL), the Community Transportation Association of America (CTAA), USAging, the Institute for Community Inclusion (ICI), and the DJB Evaluation Consulting Group. Through competitive grants, the project aims to aid nationwide communities in adopting successful, sustainable models for coordinated transportation systems that involve transportation disadvantaged in design and implementation.

Local teams create ways to involve these groups in transportation planning.

These grants support the development of inclusive and on-demand mobility solutions to address various transportation needs.

Integrated Mobility Innovation (IMI) Program³:

² Announcing the Inclusive Mobility on Demand Grantees - TP4A (transitplanning4all.org)

³ Integrated Mobility Innovation | FTA (dot.gov)

The IMI Program focuses on integrating different modes of transportation to create seamless and efficient travel experiences. The IMI demonstration program empowers the transit industry to merge and assess mobility innovations alongside current services, gauging their impact on operations and traveler experiences.

IMI comprises Mobility on Demand, Transit Automation, and Mobility Payment Integration, uniting to enhance Complete Trips for All. Goals include:

- Exploring business and tech solutions for mobility support.
- Enabling communities to embrace innovative transport solutions for efficiency.
- Promoting wide adoption of effective mobility solutions to broaden personal travel options.

IMI utilizes FTA's leadership in Intelligent Transportation Systems - Accessible Transportation Technologies Research Initiative (dot.gov) to align all IMI activities with the Complete Trip for All vision. This vision recognizes that a trip comprises multiple steps, from decision-making to reaching the destination safely and efficiently. Any disruption in this chain hinders completion and misses an opportunity.

Eligible Activities:

Allowed actions include all steps for the demonstration, from planning and business model development to equipment acquisition, software/hardware interface creation, project operation, and data provision for performance measurement and evaluation.

Eligible Recipients:

Qualified applicants are public transportation providers, including public transportation agencies, state/local government DOTs, and federally recognized Indian tribes.

Mobility on Demand (MOD) Sandbox (Current and Competitive)⁴:

This initiative encourages the testing and implementing of mobility-on-demand concepts, allowing for more flexible and personalized transportation services. The FTA's MOD Sandbox Program is a core component of their mobility innovation research. It enables communities to creatively utilize various mobility options creatively, promoting comprehensive trips. This program fosters community connectivity, reduces disparities, and ensures accessible opportunities. Examples include aiding students with night classes and enabling spontaneous travel for those with disabilities. The goals encompass efficient and seamless multimodal transit, integrated regional networks, and equitable traveler-centric service.

Primary objectives include:

- Preparing the transit industry for MOD.
- Integrating MOD practices into current transit services.
- Validating innovative MOD models and documenting best practices.
- Assessing MOD impacts on travelers and systems.

⁴ Mobility on Demand Sandbox Program | FTA (dot.gov)

Reviewing public sector requirements and regulations influencing MOD adoption.

Eligible Activities:

Allowed actions cover all steps to highlight the innovative MOD and transit integration idea, including planning, business model development, equipment procurement, software/hardware interface creation, and project operation.

Eligible Recipients:

Qualified recipients are public transportation providers like transit agencies, state/local government DOTs, and federally recognized Indian tribes. Each recipient must involve strategic project partner(s) with significant interest.

Eligible Project Partners:

- For-profit and non-profit entities, including shared-use mobility providers and technology suppliers.
- Transport service operators (e.g., employee shuttles, airport connectors, university systems).
- State or local government bodies.
- Other contributors like consultants, research consortia, non-profit industry groups, and higher education institutions.

Mobility Services for All Americans (MSAA):5

MSAA aims to provide improved mobility services to a diverse range of Americans, enhancing transportation options across various communities.

Veterans Transportation and Community Living Initiative (VTCLI, Competitive, Expired Grant Program, 2011, 2012)⁶:

This initiative focused on addressing transportation challenges faced by veterans and promoting community engagement. The FTA has granted \$64 million in competitive awards to enhance local transportation options, aiding veterans, military families, and others in connecting with essential services and jobs. By utilizing existing federal resources and collaborating with advocates, projects were established in diverse communities nationwide to improve information centers and tools for transportation connectivity.

Enhanced Mobility of Seniors and Individuals with Disabilities Section 5310 Funding (Formula Funding):⁷

The program (49 U.S.C. 5310) allocates formula funds to states and recipients for addressing the transportation needs of older adults and people with disabilities when existing services fall short. Funding is determined by each state's population share of these groups.

⁵ Intelligent Transportation Systems - Mobility Services for All Americans (MSAA) (dot.gov)

⁶ Veterans Transportation and Community Living Initiative (VTCLI) | FTA (dot.gov)

⁷ Enhanced Mobility of Seniors & Individuals with Disabilities - Section 5310 | FTA (dot.gov)

Direct recipients vary based on area size – state DOTs for rural/small urban regions and designated recipients for large metropolitan areas. Flexibility exists in choosing sub-recipient projects through formulas, competition, or discretion. These subrecipients can include government agencies, nonprofits, and public transportation operators.

The program aims to enhance mobility for these groups by removing transportation barriers and expanding options. It covers all areas (large urban, small urban, rural) and both "traditional" and "nontraditional" projects, which extend beyond ADA paratransit and public transportation alternatives.

Eligible Recipients

Eligible recipients include states, local government authorities, and designated recipients. Subrecipients include private nonprofits, state/local authorities, and public transportation operators. Operators offer shared-ride services accessible to the general public or specific segments based on age, disability, or income and qualify for nontraditional Section 5310 projects. Subrecipients should seek funding from their local direct recipient, the state DOT for small urban/rural regions and the designated recipient for large urban areas. Federally recognized Indian tribes can directly apply to FTA for Section 5310 funds allocated by states or recipients. Tribes are eligible direct recipients under Section 5311.

Eligible Activities

FTA defines traditional capital projects as planned, designed, and carried out to meet the special transportation needs of seniors and people with disabilities when public transit is insufficient, inappropriate, or unavailable. Nontraditional projects are defined as those that exceed transportation services required by the Americans with Disabilities Act (ADA), improve access to fixed-route service and decrease reliance by people with disabilities on ADA-complementary paratransit service, or provide alternatives to public transit that assist seniors and people with disabilities with transportation. FTA regulations also specify how the funding should be split between these two project types—at least 55 percent of program funds must be used for traditional projects and the remaining 45 percent may be used for nontraditional projects.

Traditional Section 5310 Project Examples:

- Buses and vans
- Wheelchair lifts, ramps, securement devices
- Transit-related IT systems (scheduling/routing/one-call)
- Mobility management programs
- Transportation service acquisition (contract/lease)

Nontraditional Section 5310 Project Examples:

- Travel training
- Volunteer driver programs
- Creating accessible paths to bus stops (curb-cuts, sidewalks, signals)
- Signage and way-finding improvements
- Incremental cost of same day/door-to-door service
- Vehicles for accessible taxi, rideshare, vanpooling
- Mobility management programs