Lessons Learned:
Technology Focused ICAM and M4A Grant Funded Projects

Since 2018, the National Aging and Disability Transportation Center has overseen 56 Innovative Coordinated Access and Mobility (ICAM) over three grant cycles and 16 Fiscal Year 2020 Mobility for All (M4A) grants. The ICAM capital grant program provides up to 80% of the project financing with a 20% match to improve the coordination of transportation services and non-emergency medical transportation services (NEMT) for older adults, people with disabilities, and people of low-income. Many ICAM grant projects include technology capabilities to better coordinate resources supporting access to mobility. Several projects have initiated Mobility Management programs to coordinate transportation providers and other human services agencies that already work with the targeted populations. Some also supported the acquisition of vehicles and related equipment for both transportation and for training older adults, people with disabilities, and people of low-income in how to use public transit services.

This report focuses on the benefits arising from the 42 ICAM & M4A technology-related grants and 12 mobility management focused grants of which some also had a technology aspect. These technology projects focused on improving consumer access to ride providers including One Call-One Click projects, scheduling/dispatch platforms, fare payment, and database integration. Intended benefits include connecting more individuals to mobility resources; reducing administrative costs; and providing more rides within budgetary limitations.

A Highlight of Successful Projects

Virginia Department of Rail and Public Transportation used their M4A grant to develop *Transportation Navigator*, a comprehensive set of online resources that describe and provide links to Virginia's transportation providers. Transportation Navigator averaged 23,000 views per month during the first six months of public availability. The Transportation Navigator resources can be accessed through their website, which includes client-specific navigator sites for disability and veteran services.

Utah Transit Authority used their ICAM grant to reduce administrative costs by one-third. UTA, in collaboration with Cambridge Systematics, developed an innovative electronic voucher solution to replace a manual paper system, particularly for trips that improve health care access. This web-based application keeps track of clients, drivers, payments, programs, and a mobile friendly portal. The mobile portal allows for origin and destination confirmation, payment processing, and client verification.

Access Services (Los Angeles, CA) used their M4A capital grant to develop an *Accessible Traveler* Mobile App that will allow riders to check their real-time vehicle location to receive an estimated time of arrival, book and cancel trips, and pay for rides using an account-based mobile fare payment platform. Access Services continues to seek additional operating dollars to support individual functionalities of the app.

Missouri Rural Health Association (*HealthTran*) used their M4A grant in collaboration with an existing technology platform provider, and more than double the rides provided. This was substantially accomplished through creating a single-ride scheduling platform using local and public transportation, and *HealthTran's* volunteer driver programs. The platform enables schedulers to arrange a ride for a customer in under two minutes. They track rides in real-time and can update the ride time and date, destination, and add a stop such as a pharmacy pickup. The M4A grant also helped to develop an online Mobility Manager training program to better understand the needs of those needing transportation, particularly to healthcare.

Flint MTA (Michigan) used their M4A grant to enable real-time ride requests for each healthcare project partner, and created individual portals for each partner organization to book rides for clients. The ride requests are scheduled through a single platform and ride requests are conveyed directly to the nearest available driver. The entire online scheduling process takes less than five minutes, and has eliminated long wait times for medical staff trying to schedule a ride over the phone. All ride targets were achieved and healthcare rides for veterans increased by 30 percent.

The **Inter-County Public Transportation Authority** (ICPTA), is a joint project led by the North Carolina Department of Transportation, the Institute for Transportation Research and Education and North Carolina State University. ICPTA used their M4A grant for two purposes:

- Obtain ride scheduling software for advanced ride reservation services in ICPTA's five-county region. This technology platform will also accommodate on-demand trip requests for a Microtransit zone that includes and surrounds Elizabeth City. This effort has been successful, enabling ICPTA to provide increased ride requests.

- Enable the state's Health and Human Services *NCCARES360* team to book rides for clients. This is a common practice for subsidy programs like Medicare Advantage, instead, *NCCARES360* chose to instruct riders to directly book rides with ICPTA.

The volunteer-based rural *LIFT Program* at **Southwestern Community Action Program** (Wisconsin) used their ICAM grant to transition 15 transit systems and human services agencies in participating counties from manual scheduling to a shared scheduling platform. Project participants were now able to coordinate rides and have transported an additional 1,000 individuals.

Prairie Hills Transit (South Dakota) used their ICAM grant to work with their transportation technology provider to develop and implement a mobile app and consumer web portal for use by individuals and nursing homes. Since its inception, a third of the riders have now use this enhanced platform.

The **Council on Aging of Southwestern Ohio** used their ICAM grant to design and implement *home52 Transportation*, a technology platform to coordinate non-emergency medical transportation services in Hamilton County, Ohio. This new technology platform can schedule and dispatch rides, and communicate with transportation providers in real time. *Home52* helps to improve efficiency and service quality, provide on-demand rides, and enable ride providers to understand the mobility needs of clients. Almost 8,600 rides were provided in the first five months of the program, with less than 4 percent of the rides being same-day requests.

MetroWest Regional Transit Authority (Massachusetts) used their M4A grant to enhance their *Catch Connect* Microtransit platform to include same-day ADA complementary paratransit trips. Users can now schedule a ride and monitor pickup times on their smartphones, and includes a real-time chat feature to connect with MRTA directly. During the duration of the grant, over 7,400 rides were provided and almost 11,000 new riders used the service, exceeding original projections of the project.

Key Lessons Learned

- Reach out to staff, riders, suppliers, funders, and community leaders to assess and more completely understand current issues and what necessary functionalities are needed to resolve those issues.

- A coordinated and interdisciplinary team structure is required to design, schedule, install, integrate and test new technology platforms – even if that team is comprised of personnel from just one vendor and the client. Every project team member needs to remain involved to understand the project status and the pain points that need immediate attention. Success requires carefully vetted project planning in advance and flexibility during project execution.

- Some riders will always prefer a call center option, either because they do not have a smartphone, do not understand how to use the technology, or do not trust the technology that's required for their service. The familiarity that grows between drivers and riders can lead to more positive rider experiences and enhance the overall efficiency of the services offered.

- The implementation phase for a technology project should always include user training and solicit user feedback, both to assess functionality and compare performance to the previous service model.

- One method of scheduling rides does not adequately fit all mobility needs. While some technology may be appropriate for small geographic areas, that same technology may not accommodate the demand for a large service area. Secondly, some technologies may not provide the consistent service quality and on-time performance required for vulnerable populations. Through prior experience, ICPTA learned that regularly recurring 'standing order' rides combined with individual advanced reservations enabled each vehicle to transport more people per hour.

- Attention and engagement, along with training, are required to successfully transition drivers and providers into using a new technology platform. It is important to know why the technology is needed, how to use the platform, and why their use of the platform contributes to the success of the transportation program.

- The ability to electronically share information can:
  - Improve the ability to group and schedule rides by time and geography, rather than funding source.
  - Reduce administrative and reporting expenses.

- Some transportation providers may transport for many agencies and have already invested in technology platforms to schedule, dispatch and monitor rides. They may not be willing to entirely transition technology platforms.

  - Including these ride providers in a coordinated system can take two pathways:
    - Link their technology platform with an existing a ride broker or transit system, using Application Program Interfaces (API). However, each time either technology platform is revised, the API link must also be revised, to entail both time and expense.

    - Have both platforms use a standard format and sharing procedure for the data fields that convey with the client and ride. These were described in TCRP Report 210: Development of Transactional Data Specifications for Demand-Responsive Transportation. Note that some data fields must be protected, as per the Health Insurance Portability and Accountability Act of 1996 (HIPPA). How a private for-profit technology provider assesses the cost of a ride or schedules rides would be proprietary information, though the price of the ride and the projected pickup and alighting times would not. The name and contact information of the client, pickup location, destination, funding source, and assigned ride provider for the ride would be standardized and shared.

    - Integration of payment systems. Standard methodologies and approaches are needed to enable state-level public sector health and human service agencies to share, with client permission, information with transportation providers. Several Medicare Advantage insurance providers already work with transportation brokers and ride providers, sometimes integrating transportation expenditures into their internal billing systems.

The Impact of the ICAM and M4A Grant Programs

The progress achieved by these grant-funded projects has connected more individuals to mobility resources; reducing administrative costs; and provided more rides within budgetary limitations. These projects are improving industry practices in a variety of ways that are both replicable and incremental:

- Several demand response technology platforms now offer riders the ability to book, pay for, and cancel rides using smartphone apps.

- A growing number of states are implementing technology solutions that fit the needs of older adults and people with disabilities to connect to mobility resources.

- Demand response transit systems are developing scheduling technologies that are most appropriate for the rider and the type of trip; regularly recurring standing orders, advanced reservation bookings, and on-demand or Microtransit.

- Programs have been adapting the use of technology to minimize administrative costs to facilitate scheduling, monitoring rides, collecting data and reporting.

Learn More About the ICAM and M4A Grant Program

NADTC collects and shares best practices of potentially replicable projects through final reports required by each grantee, a full listing of awarded grantees and their final reports can be found on NADTC's website. NADTC provides person-centered technical assistance to organizations who have been awarded Federal Transit Administration (FTA) grants, helping build capacity and creating opportunities for learning and knowledge exchange among grantees. NADTC provides technical assistance to the Innovative Coordinated Access and Mobility (ICAM) Pilot Program and Mobility for All (M4A) grant programs. For more information and eligibility, please visit FTA's website.

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