RideSheet Demand-Response Trip Coordination Lake County, Oregon



Key Dates & Project Owner

In March 2021, the RideSheet Demand-Response Trip Coordination platform went live in Lake County, Oregon. Two non-profit organizations took part in the deployment of this project in Lake County, Inner Court Family Center (ICFC) and Lake County Senior Center Association (LCSCA). Full Path Transit Technology was hired to develop the RideSheet platform. AARP provided funding for this effort.

ICFC and LCSCA both provide transportation in Lake County, and both organizations provide the only transportation options for residents without access to personal vehicles. ICFC provides transportation service through a network of volunteer drivers who use their own vehicles and are reimbursed based on their mileage. LCSCA provides its service with a fleet of vehicles and paid drivers primarily. ICFC and LCSCA have overlapping service areas in Lake County and, in some cases, have the same clients.

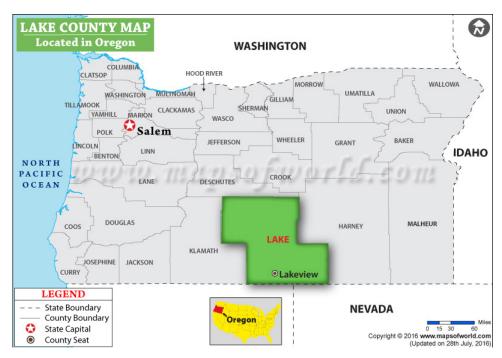
Geographic Context

This project serves an extremely rural area in south-central Oregon. Officially, Lake County is classified as a "frontier" area, which is the most rural tier in the classification system for the United States. Lake County has a population of approximately 7,895 within a land area slightly larger than the state of Massachusetts.

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¹ https://www.ruralhealthinfo.org/topics/frontier#definition

1. Lake County, Oregon²



Project Goals

Full Path Transit Technology states that this project aims to:³

- Serve as a proof of concept that a spreadsheet-based solution can meet the needs of the target agencies, for everyday use in their independent operations and as a method for exchanging trip data with partner agencies
- Identify and overcome barriers to implementing internet-dependent software solutions in a highly rural context
- Improve each agency's capacity to work with data in electronic formats (e.g., stop using paper and pencil) and to manage a "cloud" environment securely

In addition, the <u>National Aging and Disability Transportation Center</u> notes that the project has the potential enhance the passenger experience. ⁴ They explain that "...while the mechanics of the software happen behind the scenes, riders benefit directly. Riders gain more opportunities to travel as regional providers come to rely on one another when their own vehicle and driver capacity is constrained. Tapping this capacity won't require any additional phone calls or website logins on the part of the rider. They simply make their request for a ride through their preferred provider and the system is set up to serve them. Ultimately, the rider could end up paying less for a ride if the system finds enough riders to share a given trip."⁴

Specific User Groups

² https://www.mapsofworld.com/usa/states/oregon/counties/lake-map.html

³ https://www.aarp.org/ppi/info-2021/ridesheet-rural-transportation-benefits-new-coordination-technology.html

⁴ https://www.nadtc.org/news/blog/ridesheet-a-transportation-technology-solution-for-rural-america/

This project was directed toward the residents of Lake County, Oregon, particularly those without access to a private vehicle. The area has no transportation network companies (TNC) such as Lyft or Uber, nor does it have a taxi operator.

Governance Model

ICFC and LCSCA are the only transportation providers—public, non-profit, or private—in Lake County. This is not a unique situation in "frontier" and "highly rural" areas in the United States.

AARP, as a national-level non-profit, has taken on the 'MaaS promoter role on this project. Find out more about this public sector governance role, and others, on the MaaS Governance Models page. AARP has been pioneering the concept of Universal Mobility as a Service, and points out in their article 'The Transactional Data Specification: A Building Block for Equitable Mobility-as-a-Service' that

the publication of the transactional data specification (TDS) for demand responsive transportation (DRT) in 2019 played a crucial role in laying the foundation for MaaS. AARP notes that establishing the specification was "vital to facilitating the integration of human services transportation with emerging [MaaS] platforms." In addition, they note that new wave mobility services "threaten to be inaccessible to a large swath of people who currently depend on paratransit buses unless MaaS developers embrace a common format for data sharing."

Funding

AARP provided the funding for this project, in part to serve as a proof of concept for both the TDS and an open-source solution for trip coordination in small communities and hired Full Path Transit Technology to develop the platform. The project cost is not available.⁷

Project Components

The RideSheet Demand-Response Trip Coordination platform enables multiple demand-response transportation service providers to communicate with each other regarding trip requests and facilitates additional basic functions needed for demand-response service scheduling, routing, and trip tracking. The RideSheet Concept of Operations highlights some of the more detailed components:⁷

• **Spreadsheet-based tool for trip coordination:** When one agency receives a trip request, if they are unable to meet the request due to a lack of capacity, they can share the details with the partner agency and that agency can accept the trip. Overall, this technology provides a more seamless and less time-consuming solution for ICFC and LCSCA; prior to the project, they shared such requests over the phone and through email and had no viable real-time tool to automate

⁵ MaaS Governance Models page

⁶ https://blog.aarp.org/the-transactional-data-specification

https://www.aarp.org/ppi/info-2021/ridesheet-rural-transportation-benefits-new-coordination-technology.html

requests. Further, even as separate operators, they conducted their own scheduling via pencil and paper.⁷

RideSheet Coordination Success

2. RideSheet Coordination Process⁹

Figure 1 Illustration of Data Sharing Process Using RideSheet

Transportation Provider A Data Provider B Exchange Rider requests trip from their normal provider, Provider A Provider A has limited resources to provide trip Using API, Provider A can view Provider B's • Provider A identifies that Provider B has a possible opening to provide trip Using API, Provider A shares trip details and Provider B claims trip Provider B schedules trip Provider A Provider B contacts

• **Trip tracking:** RideSheet automates the process of tracking trip details, required for post-trip reporting processes to funding organizations.

rider to confirm trip

Provider B provides

• Transactional data specification proof of concept: AARP notes that "RideSheet was programmed to use the transactional data specification (TDS) as defined by Transit Cooperative Research Program's Report 210, Development of Transactional Data Specifications for Demand-Responsive Transportation. By making sure that RideSheet follows the structure established in the TDS, the project follows a best practice for data management."

Related Efforts

Related efforts to RideSheet include:

 Transit Cooperative Research Program's Report 210, Development of Transactional Data Specifications for Demand-Responsive Transportation • Open Source RideSheet project⁸

 $^{^{8}\ \}underline{https://github.com/full-path/ridesheet}, \underline{https://github.com/full-path/ridesheet/wiki}$