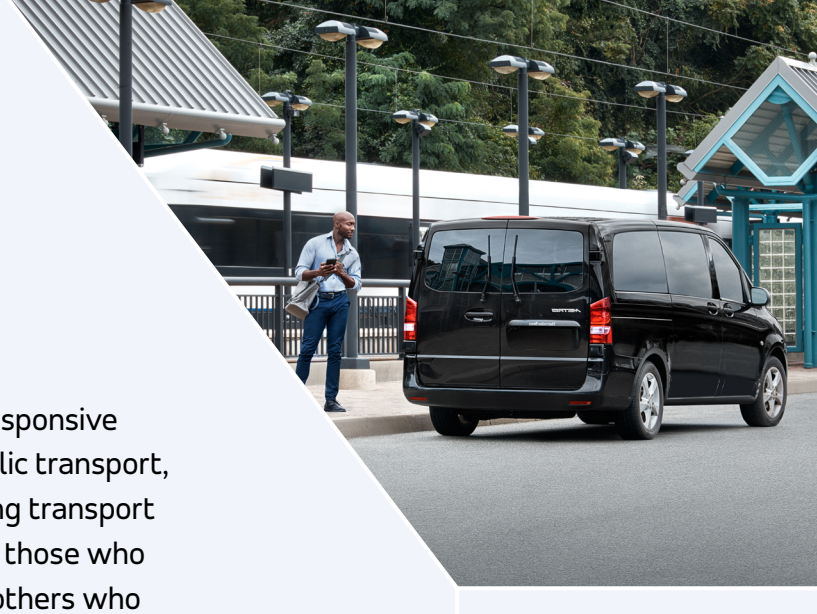
DDRT Partnerships

The demand-responsive technology of tomorrow.

Digital demand-responsive transport (DDRT) is tech-enabled shared transport that lives in the space between traditional fixed route transport and ride hailing technology. Its routes are nimble; its "schedules" aren't really schedules at all, as they shift constantly based on passenger demand; and its vehicles range in size from vans, to shuttles, or buses.



DDRT improves mobility by using demand-responsive technology and attracting new riders to public transport, while also connecting more people to existing transport infrastructure. New passengers may include those who live in areas far from access to transport or others who require first-and-last mile connections to train and bus stations, in addition to people generally in need of transport options at a lower cost than private car ownership.

Demand-responsive technology also enables flexibility – as the world changes on a daily basis, DDRT has been able to help transport adapt to changes in demand and capacity regulations, move essential workers in an efficient demand-responsive model, and even allow for underutilised vehicle and driver capacity to help with critical supply deliveries. By offering high-quality, dynamic service and by upgrading dial-a-ride and community transport services, DDRT solutions help achieve a wide variety of needs and transport goals for today, and for tomorrow.

BCG, On-Demand Transit Can Unlock Urban Mobility

“On-demand transit could help cities reduce traffic by 15% to 30%.”

READ MORE →

BCG Report:
https://www.bcg.com/publications/2019/on-demand-transit-can-unlock-urban-mobility

Use cases.

DDRT is a critical part of an integrated, all-encompassing transport system:

First-and-last mile

Community transport and dial-a-ride

Rural transport

Dynamic fixed routes

Software

Use existing fleets, plus new software. Local authorities and operators can use existing resources like vehicles and drivers, adding new demand-responsive technology to ensure efficient service across transport zones.

Software + Services

A full service transport system. To support the needs of each local authority and enable software adoption we can provide services that may include sourcing everything from vehicles to drivers, and helping with operations like customer service and marketing.

First-and-last mile.

In most places — even in parts of the largest cities — high-frequency transport isn't within walking distance of where many people live and work. DDRT can connect new passengers to buses and trains while taking single-occupancy cars off the road, relieving congestion and reducing pollution. For those without access to a vehicle, demand-responsive public transport can help unlock employment opportunities, and provide access to medical appointments, supermarkets, and other essential services

Rural areas with little access to public transport.

Some cities and towns lack the population density necessary for efficient fixed-route buses or trains, resulting in infrequent and underutilised services. DDRT can provide a more convenient and accessible service to passengers in these types of areas, offering everyone in a service zone with access to a virtual bus stop (or, pickup point with a DDRT option) that is just a short walk away from where they live or work.

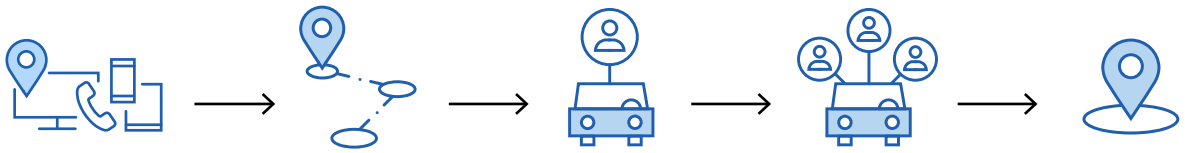
Community transport and dial-a-ride.

Community transport and dial-a-ride services provide a critical lifeline for people who need access to transportation the most. These services help people who have mobility challenges, providing a service that replaces typically inefficient options that require long lead booking time and larger pickup and dropoff windows. DDRT can offer higher quality service for passengers by enabling demand-responsive journeys in real time, while reducing trip costs by having more efficient shared journeys.

Dynamic fixed routes.

As both supply and demand shift with regulated social distancing measures, transport can be responsive, in real-time. Fixed routes can use demand-responsive technology to manage peak travel, book seats, and accommodate evolving safety practices.

How it works:



Request by app/phone/web → **Dynamic routing** → **Passenger pickup** → **Efficient sharing** → **Seamless dropoffs**

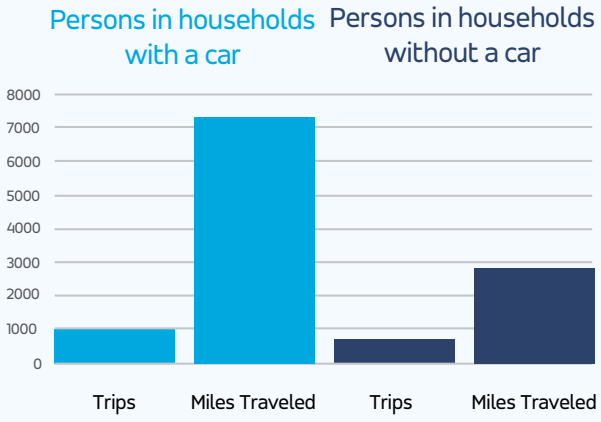
Demand-responsive services allow people to request a trip by using an app or by calling a dispatcher, prompting a vehicle to a nearby corner, or virtual bus stop. That vehicle is dynamically routed to pick them up and take them to their destination, while also being able to pickup and dropoff other passengers along the way, all within established capacity parameters and constraints. Smart routing means passengers or even deliveries going in the same direction are able to be grouped into the same vehicle — minimising and even eliminating minor detours. By using dynamic routing technology, demand-responsive transport can optimise and balance passenger convenience and overall service efficiency.

Via Data Snack

“Families with the lowest income are the most likely to have no access to a car (over 40%). As a result, they make nearly 20% fewer trips and travel 40% less distance than the average household.”

READ MORE →

People in households without a car make fewer trips than their car-owning counterparts, and their trips are much shorter, too



Source: National Travel Survey

Via Data Snack:
https://ridewithvia.com/resources/articles/in-the-united-kingdom-people-without-a-car-make-40-fewer-trips-than-their-car-owning-counterparts/

DDRT services solve a range of transport challenges: some rail and bus infrastructure is perpetually overloaded or underutilised, while other neighbourhoods lack transport or have very limited service. Meanwhile, traffic congestion and vehicle emissions continue to grow, and owning a personal vehicle is an expensive necessity (rather than an unnecessary choice) in all but a few places. At their best, demand-responsive services deployed in partnership with local transport authorities and city governments can address equity, accessibility, and environmental needs.

Department for Transport, Transport and environment statistics: Autumn 2021

"Transport produced 27% of the UK's total emissions in 2019. Of this, the majority (91%) came from road transport vehicles. The biggest contributors to this were cars and taxis, which made up 61% of the emissions from road transport."

READ MORE →

A strong relationship between demand-responsive technology providers and local communities is beneficial to all, including:

- **Individuals with mobility concerns who require accessible vehicles.**
- **Passengers without smartphones who are able to book online or by calling a dispatcher.**
- **Those without credit or debit cards who can pay with cash.**
- **Cities at large that are looking for easily adaptable services – those that are able to accommodate shifts in demand and growing equity concerns, while also reducing congestion and CO2 emissions.**

Department for Transport release:
https://www.gov.uk/government/statistics/transport-statistics-great-britain-2021/transport-statistics-great-britain-2021

Public benefits.

Department for Transport, Transport Statistics Great Britain: 2021

“92% of passenger kilometres travelled in Great Britain was made by cars, vans and taxis.”

READ MORE →

As part of a transport network that integrates various modes, DDRT plays a key role in:

1.

Encouraging drivers of personal vehicles to switch from their own cars into public transport options, relieving traffic congestion and reducing carbon emissions.

2.

Promoting economic development by connecting passengers to local businesses and workers to employment.

3.

Providing equal access to jobs, critical services like medical appointments, and recreational opportunities for people who don't otherwise have a way to get to those services.