spare

2022 Global Impact Report

A statement from Spare's founders

Impact is at the core of everything Spare does. When we founded Spare in 2015, we set out to make every ride possible.

As we looked around our campus, we saw a transportation system that was inefficient and wasteful: there were spare seats in cars, meaning there were more cars on the road than necessary and literal tonnes of carbon emissions that could have been avoided. We were alarmed at how inefficient and inconvenient transit was for riders with disabilities.

We believed we could begin to solve these problems by **placing impact at the core of everything that Spare does.** That's when our mission to unlock the power of mobility for everyone was born.

Fast-forward 7 years and many ideas and innovations later, our tech-enabled platform is the backbone of over 200 services and empowers transit and mobility innovators, both in the public and private sectors. Spare's philosophy, which rests on its open API, is that anyone can and should be able to launch an efficient, well-run transportation network with ease.

All of us at Spare are invested in pursuing our mission in new and creative ways. By placing the need for a reduced environmental footprint at the forefront of our operations we have ensured that we can continue to be a sustainable organization.

To understand our people's perspective on our mission, we asked our team of Sparetians, how they view the impact of their work. Sparetians told us that even as our products gained more market share than ever, their drive to make every ride possible fuelled continuous innovation and refinement of our products. Moreover, Sparetians' commitment to making an impact extended beyond just our products and into the entire way our company conducts itself.

Three impact themes emerged from listening to what they had to say:

- Driving change on climate
- Enabling social equity
- Reducing social isolation

These are the three core drivers that motivate our Sparetians; it's why Spare exists. As people who are passionate about measuring our impact, we decided to turn these themes into data. We formulated hypotheses that were tested by our data scientists and are now delivered to you in this 2022 Global Impact Report.

We are thrilled to present our key metrics that illustrate how far we've come and how we've worked to make inroads into improving the environment, accessibility and the community. During this analysis, we also set out to determine if Spare is a Net Zero company. (Spoiler alert: We are.) Our internal estimates suggest that in the last 4 years, Spare's technology has been directly responsible for preventing the release of more than 1,300 tonnes of carbon dioxide equivalent (CO2e). In this report, we'll explain our methodology in calculating this important metric.

But this is only the beginning. We continue to find creative new ways to improve accessibility and sustainability across Spare – even within our own internal processes. It is our hope that this report will be the first of many, and we plan to continue tracking and growing our impact.

Together, we can connect people and places, and make every ride possible.

Thank you for joining us on this journey, and we look forward to sharing with you our many future successes.

— Kristoffer, Josh and Alexey

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Introduction

Innovation in transport continues to provide us with more choices in how we get to the places we want to go. Communities expand and contract based on how transportation functions and it can influence whether someone can get a job, receive care or see a loved one. Still, the challenges faced by the industry to reduce its environmental impact while broadening the scope of its commuters continue to be an issue. We strive to deliver a platform that puts people first by prioritizing the values of our modern society: equality, convenience and environment.

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Spare has larger goals in mind than just helping our customers move people from point A to point B. We see how transport systems and increased mobility can affect not only the lives of individuals but can positively influence the world around us.

Over several years, Spare has powered almost 5 million on-demand trips for over 100 partner organizations, covering 63 million kilometres across the world. Our efforts have meant that we've helped avoid 1,300 tonnes of carbon emissions, created almost 8 million new social interactions, and helped save $30+ million in healthcare costs.

Everyone at Spare, and everyone who has supported us along the way, should know that they have played an important role in making transportation more accessible, more sustainable, and more inclusive for riders.

5 million
on-demand trips

1,300+ tn
CO2e emissions avoided

8 million
new social interactions

$30+ million
saved in healthcare costs

Driving change on climate

Passengers moved
Spare has empowered our customers to move almost 5 million passengers, travelling a total of

🌐 63 million
kilometres

Total greenhouse gas emissions

As a software company, Spare doesn't physically move people from A to B; that's what the organizations that buy our software do. Since January 2019, we have empowered our customers to move almost 5 million passengers, travelling 63 million kilometres in the process. That's ¾ of the way from Earth to Mars!

Our customers don't provide these trips using e-scooters or bicycles or wingsuits; the reality is, they deliver them using road vehicles, the vast majority of which run on gas or diesel. That means they emit greenhouse gases (GHGs) as they drive around. Even the electricity that powers the electric vehicles on our platform will have some carbon cost associated with it.

It might be obvious, but it's important to be honest here: every single trip powered by Spare emits at least some GHGs. By our calculations, the average trip on the Spare platform emits 5 kg of carbon dioxide equivalent (CO_2e).

That works out to emitting 28,000 tonnes CO_2e overall.

Total greenhouse gas emissions
Metric tonnes of CO_2e cumulatively emitted across all Spare services.

⚖️ 27,948 tn

Greenhouse gas emissions
Metric tonnes of CO_2e emitted across all Spare services, per month.

Greenhouse gas emissions avoided

To fully understand Spare's carbon impact we must ask the question: how many emissions would have been released to serve those 5 million trips, if Spare didn't exist?

By their very nature, our customers' services do one of two things

1. They create new trips that would never have happened otherwise (we call this 'trip induction')
2. They replace trips that would have happened on other transportation modes (we call this 'mode shift').

On average, ~20% of the trips that take place on Spare platform are 'induced' trips. We know this because we regularly ask our customers this in travel surveys. Since induced trips would never have happened without Spare, our net contribution is to add GHGs to the atmosphere. That's unfortunate, but it's the price that's paid for helping our riders access opportunities such as jobs, schools and healthcare.

Of the remaining ~80% of trips that were not induced, the majority (50%+) would have otherwise happened in a private car or a taxi. These modes emit far more GHGs than Spare-powered services, because they're not shared. Of course, our customers' services also shift some people away from greener modes such as buses, cycling and walking, but that's only the case for relatively few trips.

When we do the math on both mode shift and trip induction, we find that Spare has helped customers avoid over 1,300 tonnes CO2e. That equates to removing 280 cars off the road, or planting 21,000 trees!

Looking at it another way, each Spare employee helps to avoid 1 tonne CO2e every single month! That's equivalent to removing one transatlantic flight per employee every month – and it makes every day at work worth it.

Avoided emissions
Spare helped customers avoid over 1,300 tn CO2e, or an equivalent of

🚗 **280**

cars removed from the road.

Each Spare employee helps to avoid

⚖ **1 tn CO2e**

every single month!

Total avoided greenhouse gas emissions
Metric tonnes of CO2e cumulatively emitted across all Spare services.

⚖ **1,341** tn

Avoided greenhouse gas emissions
Metric tonnes of CO2e emitted across all Spare services, per month.

Enabling social equity

Powering accessible trips

Spare platform enables riders with a wide variety of accessibility needs to book rides on our customers' services. Those accessibility needs include wheelchairs, assisted boarding, accompanying adults, and much more.

Over the last four years, the number of accessible boardings on the Spare platform has shot up, especially as more paratransit services have joined the platform. In total, we've powered over 300,000 accessible trips, and they make up almost 10% of all trips on our platform today.
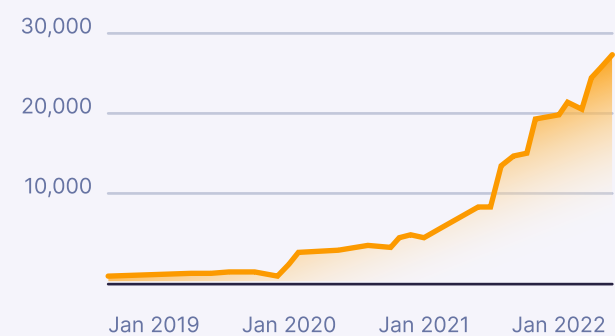
Total accessible boardings
Cumulative boardings with 1+ accessible feature, across Spare.

♿ **306,000**

Accessible boardings
Monthly boardings with 1+ accessible feature, across Spare.

30,000

20,000

10,000

Jan 2019   Jan 2020   Jan 2021   Jan 2022

Inducing trips for vulnerable populations

Our software empowers customers to provide mobility services for marginalized communities that traditionally may not have good access to public transportation. We run digitized travel surveys twice a year and use the data to estimate how many trips are taken by vulnerable populations – low-income, senior, and disabled people.

Over time, we've powered over 1 million induced trips for vulnerable people. That refers to trips those vulnerable people would not otherwise have taken, had it not been for Spare. We feel great about this stat, because it means we're unlocking a huge amount of social and economic potential from a group of people who often have trouble accessing transportation.

That's equivalent to giving a ride to every single person in Dallas, TX, a city close to our hearts because of the hyper-successful DART GoLink service we power there.

Total induced vulnerable boardings
Cumulative induced boardings for low-income, senior & disables riders.

1.1 million

Induced boardings for vulnerable people
Monthly induced boardings for low-income, senior & disabled riders.
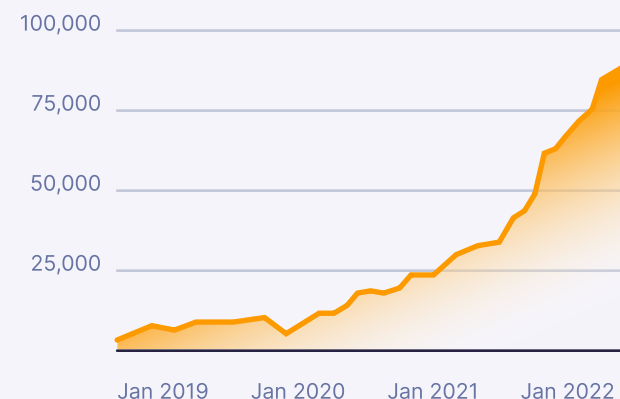
Affordability of trip fares

Transportation has to be affordable for it to be of any meaningful use to people. To calculate the affordability of taking two trips per weekday on each Spare service, we base it on the median fare for each service, and present it in comparison to the average local income.

We found, on average, somebody riding a Spare-powered service every day of the week would expect to pay around 2.5% of their household income. That's impressively low, given that households in the US typically spend about 12% of their income on transportation.

Average affordability of trip fares
Median cost of two Spare trips per weekday, as proportion of local income (%).
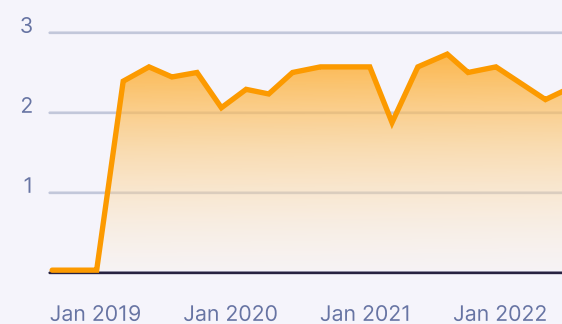
Reducing social isolation

Reduced loneliness rate
Mean share of riders reporting reduced loneliness after riding with Spare.

35%

Even before the COVID-19 pandemic, loneliness was a serious social challenge, particularly for vulnerable social groups that found it hard to move around. Reducing loneliness can have a huge impact on an individual's mental wellbeing, which translates to a whole host of benefits to society, the economy, and healthcare spending.

We regularly survey our riders, and more than 1 in 3 riders report feeling less lonely after traveling with Spare. And this is just an average – on some paratransit services, over 80% of riders reported feeling less lonely after a Spare ride!

Healthcare savings from reduced loneliness

Providing on-demand transportation to senior citizens (aged 65+) plays a vital role in enabling them to continue living sociable and active lives. Delaying the time when a senior eventually enters the healthcare system can help save a lot of money.

Based on a methodology developed by the consultancy Deloitte*, we estimate that services powered by Spare help save $32 million in healthcare costs for seniors. That translates to saving $80 in healthcare costs per senior trip, which far outweighs the operational costs of providing that trip.
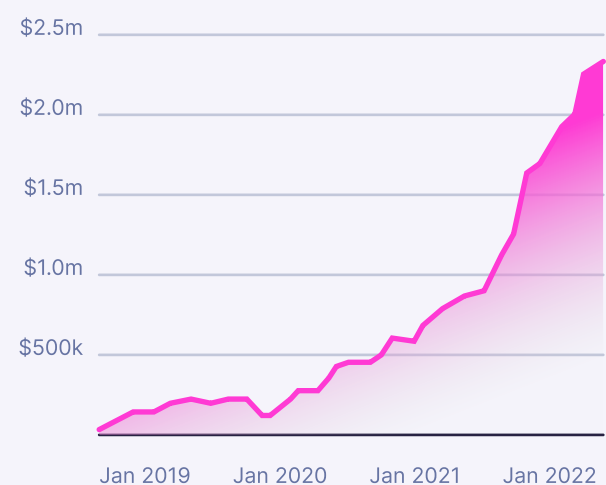
Total healthcare savings from reduced loneliness
Cumulative reduction in healthcare costs due to reduced loneliness.

$32 million

Healthcare savings from reduced loneliness
Monthly reduction in healthcare costs due to reduced loneliness.

$2.5m
$2.0m
$1.5m
$1.0m
$500k

Jan 2019   Jan 2020   Jan 2021   Jan 2022

* Deloitte report for ECT: Why Community Transport Matters Proving the case for community transport and its positive impact on health, wellbeing and communities

Net new 'social collisions'

By inducing new trips, the services powered by Spare enable people to go to places they otherwise wouldn't have gone to.

Through mode shift, Spare also changes the number of people that a person is likely to interact with in the vehicle itself. For instance, riders might interact with more people in a shared microtransit bus than they would in a car, but fewer people than they would in a bus or train.

Both in the vehicle and at their final destination, the 'social collisions' our riders have with others can reduce social isolation.

We estimate that our customers' services have created 7.4 million net new social collisions that otherwise would never have happened. Given that the average person meets 80,000 people in their life, that equates to almost 100 lives' worth of new social interactions.

Total net new 'social collisions'
Cumulative net new social collisions, from induced trips + mode shift.

7.4 million

Net new 'social collisions'
Monthly net new social collisions, from induced trips + mode shift.
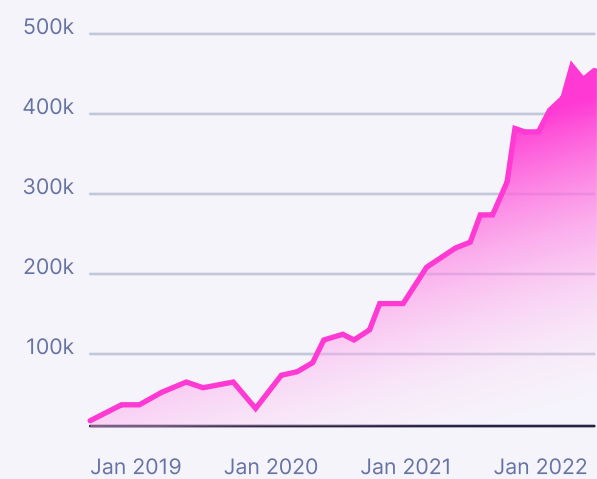
Net Zero

Earlier in this report we showed that in a world without Spare, emissions from the transportation sector would be 1,300 tonnes CO2e higher than they are today.

To truly understand our 'net' carbon impact as a company, we need to compare those emissions we helped our customers avoid to the 'back-office' emissions we produce every day to build, sell and support our software.

Accounting for the four major sources of our back-office emissions – business travel, lighting and heating our office, server energy, and employee commuting – we currently emit 13 tonnes CO2e per month. During the COVID-19 pandemic, this was far lower, but our emissions rate will inevitably increase as we keep growing the company.

Overall, Spare's back-office operations have emitted 228 tonnes CO2e. This represents an 8% addition to the total emissions of our customers' service operations.

So, we've helped the transportation sector avoid 1,300 tonnes CO2e, while emitting only 228 tonnes ourselves. The math is pretty simple: we avoided almost 6x more carbon emissions than we emitted.

This makes us the first company in our industry to conclusively demonstrate that we are **net zero!**

Total back-office greenhouse gas emissions
Metric tonnes of CO2e emitted from Spare's back-office operations.

⚖ **228.2** tn

Back-office greenhouse has emissions
Metric tonnes CO2e emitted from Spare's back-office operations.

■ Commuting   ■ Servers   ■ Office heating/ electricity   ■ Flights
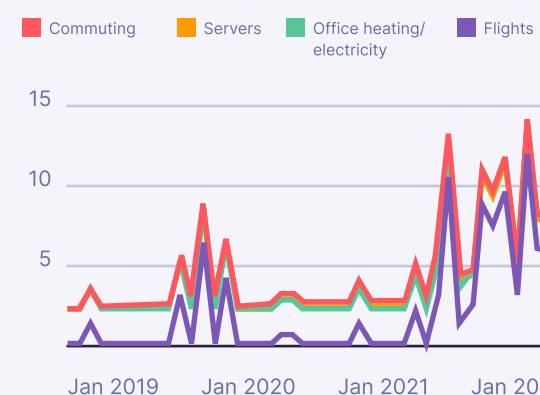
Emissions avoided
Comparing total back-office greenhouse gases emitted to total avoided greenhouse emissions, we **avoid 6x more emissions** than we produce!

Total back-office greenhouse gas emissions
Metric tonnes of CO2e emitted from Spare's back-office operations.

⚖ **228.2** tn

VS.

Total avoided greenhouse gas emissions
Metric tonnes of CO2e cumulatively avoided across all Spare operations.

⚖ **1,341** tn

About Spare

Spare was founded in 2015 to make every ride possible by giving public transit agencies better tools to drive operational efficiencies. Our tech-enabled platform makes it easy for public transit agencies to launch and manage microtransit, ADA paratransit, non-emergency medical transportation (NEMT), and other demand responsive commingled services such as the award-winning Dallas Area Rapid Transit (DART) GoLink, one of the largest multi-modal microtransit service in the world, KnowRoute, the first on-demand transit service in Japan, and the award-winning commingled service (ADA paratransit and microtransit) for Citibus in Texas.

Spare is trusted by the most innovative and forward-thinking transit agencies of all sizes across four continents. In the past few years, we have expanded into urban and rural transit agencies across North America including in Florida, Texas, Nevada, Colorado, Missouri, Massachusetts, Oregon, and Minnesota. Spare is also trusted by many of the biggest automakers, including Toyota and Mitsubishi, to provide on-demand transportation services to their customers.

In 2021, Spare raised a Series A funding round that is going towards further building out the world's most sophisticated on-demand transit platform. Our goal is to enable better cooperation between different transportation providers, and increase access to cost-efficient and inclusive shared rides.

spare

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