

# MOBILITY & **ACCESSIBILITY**

Using smart, secure connectivity to bring  
inclusivity and accessibility to transportation



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## INTRODUCTION

We live in an age with connectivity at our fingertips. From mobile phones and applications to smart home devices, our lives are inextricably connected through networks and devices, and transportation is not an exception to this new normal.

Connectivity in transportation is becoming more and more normalized. From GPS and infotainment systems in vehicles to ride-hailing services made easy with mobile applications, many of us already utilize connectivity in our everyday mode of transportations without giving it much thought.

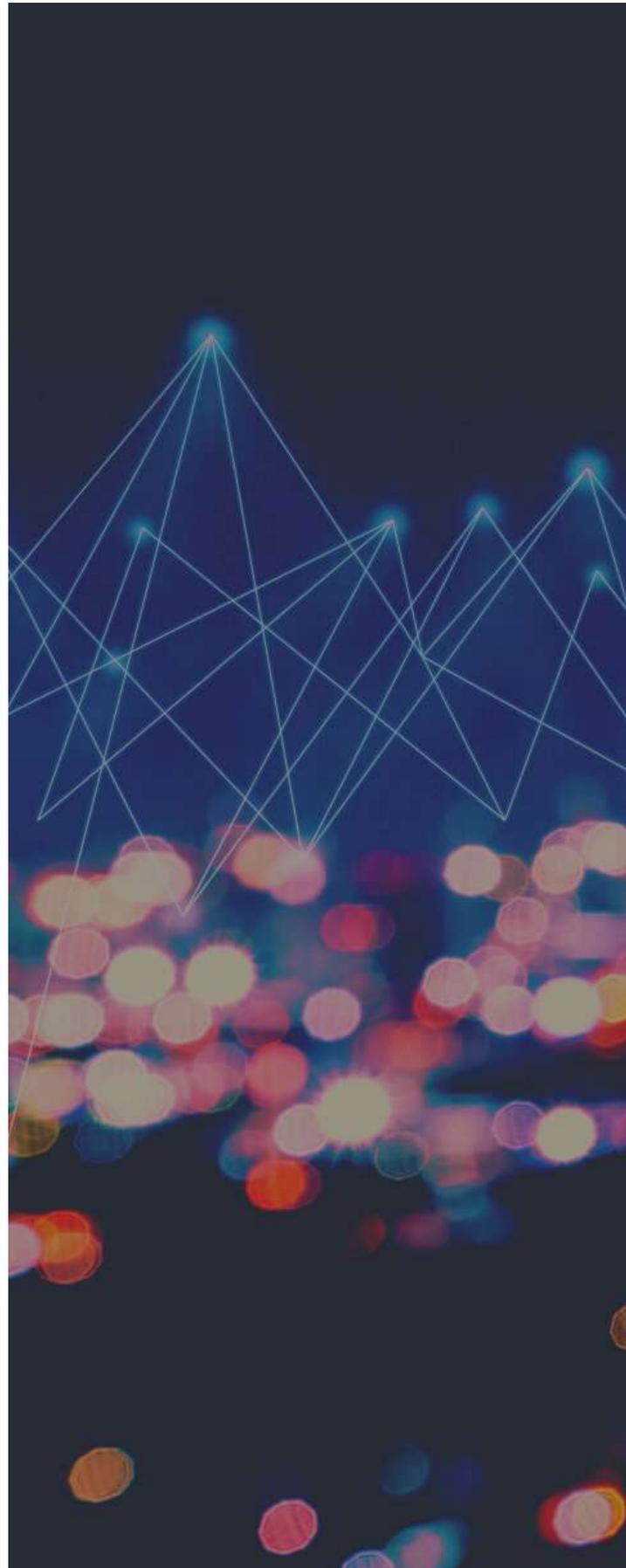
However, the reality of the situation for those with mobility or accessibility challenges is much more difficult and complex. For example, while popular ride-hailing service apps may be readily available to those who are able, for someone who is blind, or in a wheelchair, it can be a daunting task.

In 2021, England's Department for Transport published a report on Disability and Accessibility and stated that in 2019, adults with disabilities made "26% fewer trips and traveled 41% fewer miles" than adults without disabilities.\*

There is no doubt that the future of mobility will continue in the direction of connectivity and autonomous technology. More and more, smart cities will become smarter as we utilize the data we get from the aforementioned connectivity to better develop infrastructure for a city's residents.

However, if the said infrastructure is not optimized for its residents living with disabilities and other mobility challenges, is it really, truly "smart"?

This white paper will explore what it means to be living with disabilities in a mobility-centric smart city, how connected transportation technology can remedy these issues, and how AUTOCRYPT's fleet management solution sought to be the link between the challenges and a fully-functioning smart city through a strategic partnership with a paratransit non-profit social cooperative.



\* Department for Transport, 2021. "Transport: Disability and Accessibility Statistics, England 2019/20"

## THE NEW ERA OF SMART CITIES

The concept of the "smart city" was first introduced in early 2009, defining it as a "city that makes a conscious effort to innovatively employ information and communication technology (ICT) to support a more inclusive, diverse and sustainable urban environment."\*

A smart city should address the following four societal needs:



To address these needs, a smart city utilizes several aspects of developmental technologies like energy, data management, and connectivity in order to do the following:

1. Allow physical infrastructure to be used more effectively and optimally through the use of AI and the Internet-of-Things (IoT) to better the city in different areas
2. Improve cooperation and collaboration of the government and its citizens through open invitations to participate in innovation and data collection
3. Take feedback to learn and adapt to the societal needs in order to become smarter

A prime example of a smart city solution is implementing smart traffic control systems, where the traffic infrastructure runs based on need, and not necessarily in regards to elapsed time. In major metropolises, traffic congestion can be a major concern; residents can spend unnecessary time stuck in traffic and congestion can cause increased emissions contributing to further air pollution. INRIX, a transportation analytics provider, reported in 2017 that traffic congestion cost drivers almost \$305 billion.\*\* The high cost is the result of a number of variables including loss of hourly wages as well as extra fuel. To combat this, the city of Dallas, Texas in the US implemented an advanced traffic management system (ATMS) to collect and analyze real-time data from traffic sensors, traffic cameras, and other roadside units (RSUs). Officials could then use this data to make optimized infrastructure to save time and financial resources for both residents and the city.

It is important to note that smart city solutions are not limited to urban areas. Advanced connective technology can have applications for projects in suburban areas and even rural regions. Despite the global rural population expected to decrease to 3.1 billion by 2050,<sup>†</sup> as much of the world shifts to urban living, the connectivity of rural areas will most likely increase. This is because rural areas will need to grow more food with fewer workers, presenting a significant opportunity for connected and smart technology.

However, even with the open opportunity, there are barriers that will keep smart cities from realizing their full potential, accessibility being a major one.

\* Rosati, Conti, 2016. "What is a smart city project? An urban model or a corporate business plan?"

\*\* INRIX, 2017. "Los Angeles Tops INRIX Global Congestion Ranking" <https://inrix.com/press-releases/scorecard-2017/>

† United Nations, 2014. "World's population is increasingly urban with more than half living in urban areas"

## THE NEED FOR ACCESSIBILITY

Accessibility refers to the ease or lack of difficulty one may have when attempting to utilize services and reach opportunities. The most famous definition of accessibility was given by Walter G. Hansen as “the opportunity which an individual or type of person at a given location possesses to take part in a particular activity or set of activities.”\*

Within accessibility, there are various elements to consider such as financial accessibility (whether the opportunity is achievable within a certain range of monetary ability), physical accessibility (whether the system is available for anyone to utilize physically), or even communications accessibility (can everyone access it to communicate properly in order to achieve the opportunity). While broad in scope, accessibility is a concept that is significant to transportation as most transport has a destination and an "opportunity" as its end goal. For example, public transportation systems like the metro/subway or a public bus system give passengers access to where they want to go at a lower cost and personal vehicles allow access for drivers and passengers to have a private mode of transportation to get from point A to point B.

While those of us who are able to use these accessibility infrastructure systems take systems such as these for granted, those who lack accessibility face challenges each and every day. We often refer to those living with disabilities as their need for access is even more essential as they may face more challenges when it comes to moving from place to place. This can refer to visible disabilities (where effects of the disabilities are more noticeable to others) as well as invisible disabilities whose effects are not as immediately noticeable. But when it comes to the need for accessibility in mobility, we should also consider those living with other mobility challenges, like expectant mothers, parents with young children, or the elderly. Though those who have no major issues with mobility may think of accessibility features as extravagant or unnecessary, the reality is that those with mobility challenges make up a large chunk of the general population.

For example, people living with disabilities often choose to live in urban areas due to closer proximity to their primary care physician or other healthcare facilities. Additionally, conveniences such as grocery stores or public transportation tend to be more available in urban areas. By 2050, 68% of the world's population is expected to live in urban communities, and of those people, roughly 15% will be people with disabilities. This means that an astounding 937.5 million people with disabilities will be living in urban areas. Add to this number others with mobility challenges, and it is safe to say that the number of those struggling with mobility will be far too large for infrastructure to remain the way it always has.

## TRANSPORTATION CHALLENGES

Those with mobility challenges face a number of dilemmas when considering modes of transportation. Let's take a look at some of the common modes of transportation available in an urban area, and the difficulties those with disabilities or other mobility challenges may face.

\* Hansen, 1959. "How Accessibility Shapes Land Use" Journal of the American Institute of Planners, Vol. 35, No. 2.



## 1 - WALKING

Due to the negative effects that traditional motorized vehicles can have on the environment as well as the positive impact on walking for cardiovascular health, many cities have begun to implement more walking-friendly infrastructure like sidewalks and stoplights for pedestrian crossing.

Re-allocating space for sidewalks has been shown to have positive impacts. Walking is a social activity and an affordable way of getting around short distances. However, though designing sidewalks may seem to be a simple task, there are many factors at hand in order to make them more accessible. Sidewalks need to have a minimum

width. In the U.S., this width is 5 feet if set back from the curb or 6 feet if at the curb surface. This ensures that people can walk together and that wheelchairs are able to pass. Curbs also need to be accessible for strollers or wheelchairs, and regular maintenance needs to be considered if the sidewalk in question deals with a large amount of foot traffic. Sidewalk materials also make a large difference in the quality of the sidewalk experience for those using wheelchairs - while materials like cobblestone may be aesthetically pleasing, the gaps between the stones make for a bumpy ride and difficulty for those pushing the wheelchairs as well.

Walking is also not limited to sidewalks. When reaching their target destination, those with disabilities or mobility challenges may find it difficult to make it the final few feet to their destination if there is no accessibility ramp provided, or if the ramp itself has too steep an incline.

As mentioned before, walking is limited to a shorter distance than other methods of transportation. Longer distances may not be possible for those with challenges or be difficult for those with time constraints.

## 2 - PERSONAL VEHICLES

As the need for travel extends beyond a walkable distance, the next obvious choice of transportation for most people would be to drive their personal vehicle. Driving a personal vehicle allows the driver and its passengers to freely go nearly door-to-door, without limitations in distance.

A vehicle, while convenient, has many more limitations for those with disabilities. Firstly, while driver's licenses are available to some with disabilities, the driver still needs to pass the tests and checks in order to ensure others will not be harmed.



This automatically eliminates those with visibility impairments or those with physical limitations who are unable to make modifications to their vehicle. For those with mobility challenges, this may mean that driving is not possible after a certain age.

Many tout autonomous vehicles as the cure-all for giving those with disabilities and challenges wider accessibility. While it is very true that the technology for autonomous vehicles has developed greatly in the past several years, it is imperative that self-driving technology reaches higher levels of autonomous driving before no human interaction or override is required while on the road.

Vehicles, both traditional and autonomous, are also costly upfront, with down payments causing a financial burden rather than giving mobility freedom. With modifications for those with disabilities, the costs often have nowhere to go but up.

### 3 - TAXI / RIDE-HAILING

With the option of a personal vehicle eliminated, passengers may opt for a taxi. Taxis tend to be more readily available in urban areas, and for those who are unable to hail a taxi on the street, call services are available to pick up passengers at a designated time.

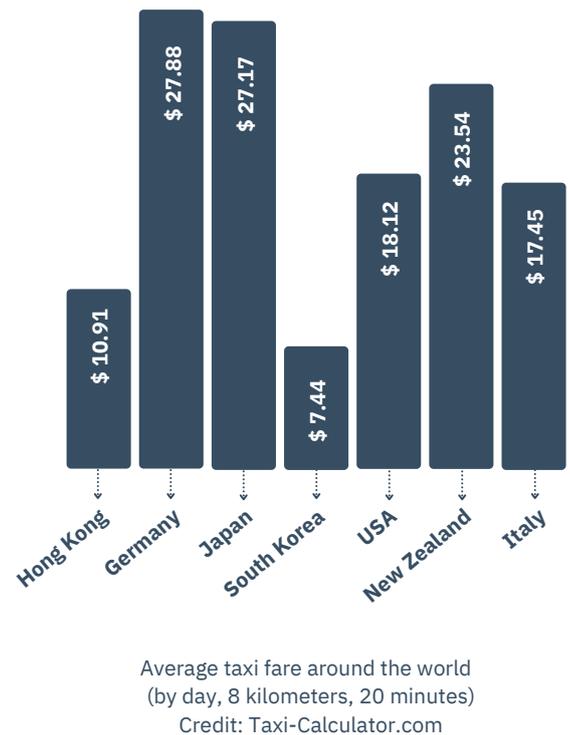
However, taxis tend to be expensive, and fares can add up with longer distances and regular rides. For example, a 20-minute, 8-kilometer long ride in the United States can be over \$18 per ride, which means a round trip taxi ride could be over \$36 for one appointment. As a long-term solution, taxi rides are not feasible for the average person, and especially not for those living with mobility challenges.

Taxis are also fairly uniform - most vehicles are sedans that are not made for those with disabilities. They tend to not be wheelchair accessible, and drivers are not always equipped to handle any assistance that a passenger may require.

In order to address the issues that many, including those with mobility challenges, face with taxis, ride-hailing services have grown in popularity and availability. Users can simply utilize a mobile device, install an application, and "hail" a ride. These rides are sometimes from taxi services, or from other drivers in a nearby area utilizing their personal vehicle as a taxi service. While these services tend to be more affordable than a traditional taxi, they still have many of the same issues as a regular taxi service does.

### 4 - PUBLIC TRANSPORTATION (SUBWAY / BUS)

Public transportation systems are fairly common in urban areas. Metro/subway systems are common methods of transportation in metropolitan areas, and bus systems can be found even in the nearby suburban areas. However, though public transportation may seem like the most accessible method of transportation, oftentimes it can be one of the most inconvenient for those with mobility challenges.





MODE OF TRANSPORT	PRICING	DOOR-TO-DOOR?	ACCESSIBILITY
TAXI	HIGH	YES	NOT ALL TAXIS ACCOMMODATE WHEELCHAIRS OR VISUAL/HEARING IMPAIRMENTS
FIXED ROUTE TRANSIT (PUBLIC TRANSPORTATION)	AFFORDABLE	NO	SHARING SPACE IS DIFFICULT FOR THOSE WITH DISABILITIES, NOT ALL VEHICLES ARE WHEELCHAIR ACCESSIBLE
RIDE HAILING / SHARING SERVICE	VARIABLES	YES	DIFFICULT TO NAVIGATE STATIONS / STOPS, WHEELCHAIR ACCESS IS LIMITED
DRIVING (PERSONAL VEHICLE)	HIGH (INITIAL)	YES	THOSE WITH VISUAL IMPAIRMENTS MAY NOT BE ABLE TO DRIVE; THOSE WITH DISABILITIES MAY NOT BE ABLE TO OBTAIN A LICENSE
WHEELCHAIR	AFFORDABLE	YES	SHORT DISTANCES ARE POSSIBLE, BUT LONG-DISTANCE IS CHALLENGING; SIDEWALK ACCESS IS NOT ALWAYS RELIABLE FOR THOSE W/ DISABILITIES OR VISUAL IMPAIRMENTS
WALKING	AFFORDABLE	YES	

As a popular means of transport, public transportation can get congested at peak hours, meaning those with visual impairments, wheelchairs, or parents with young children can feel overwhelmed or even unable to navigate their way through. Additionally, wheelchair-accessible elevators or ramps are often placed where there are lower amounts of foot traffic, meaning that those with disabilities have to navigate their way around the area, which can be time-consuming. Although public transportation tends to be one of the more affordable methods of transportation, because of the difficulties involved in utilizing the infrastructure, those with mobility challenges tend to gravitate towards other methods.

Whether it is through using non-motor methods of transportation like walking, bicycling, or a wheelchair, through motorized transport, or even public transportation, for those with mobility challenges, every mode of transportation presents its own unique set of challenges. This is extra time, money, and mental stress that people must endure in order to complete a seemingly simple task like getting from point A to point B. Smart cities are, therefore, ideal opportunities to address these issues and bring inclusive mobility to the forefront.

## BARRIERS TO SMART CITY DEVELOPMENT

We mentioned earlier that a smart city utilizes developmental technologies like energy, data management, and connectivity in order to allow infrastructure to be more optimally used, improve cooperation for residents and government to innovate and collect data, and then utilize said data to learn and adapt existing infrastructure to become smarter, hence a "smart" city. Smart cities are not simply about how a city's government provides connected infrastructure and services to benefit citizens - if that were the point, smart cities would simply be "digital" cities or "connected" cities. A smart city's very essence and development are dependent on its residents to contribute to its service with data.

This means that if the majority, if not all, of the residential population, is unable to utilize the smart infrastructure, it really is not fulfilling its goal of becoming "smart." It's simply useful to the handful of residents who can utilize it. Research showed that due to the aforementioned challenges in utilizing different modes of transport, as well as other difficulties within existing mobility infrastructure, 28% of those living with disabilities rarely leave their home.\* This means that the existing data does not take into consideration a significant portion of the population who could be contributing to smart city and smart mobility development.

While there may not be a cure-all for the barriers to establishing a truly "smart" smart city, there are short and long-term solutions to ensuring that mobility becomes more accessible and inclusive. Short-term, utilizing fleet management solutions allows for increasingly optimized services, especially when using artificial intelligence (AI) and machine learning. Reducing the potential for human error for passengers, drivers, as well as service providers allows for an increased sense of reliability for service users, which is key in increasing the probability for participation in the smart city model.

Increasing the number of participants in smart city infrastructure then leads us to long-term changes needed in infrastructure. "Barrier-free" infrastructure, which refers to infrastructure designed or planned to be accessible and inclusive, needs to become a part of policy development. Existing policies and regulations may state that accessibility is a must for public infrastructure, but with the quick, impending changes with digital and connected infrastructure, accessibility is not necessarily a prioritized consideration when changing over to a smart city structure.

Our goal is to bring to the forefront technologies and solutions that will pave the way for more research labs, organizations, service providers, and the like, to implement these short-term solutions to fast-track more long-term change.

\* AAPD, "Equity in Transportation for People with Disabilities"

## FLEET MANAGEMENT FOR SHARED MOBILITY

Finding a solution to ensure that mobility is inclusive is no simple task. While there are paratransit services available for those who need extra assistance, this is by no means a cure-all for the issue of accessibility in transportation because while paratransit does offer a useful means of transportation for those with disabilities, they are not without their limitations. Prices tend to be higher, and only increase with longer distances and time. This means that regular usage can be financially daunting.

This means that there are no perfect services, but that the services themselves need to utilize a new model of managing their fleets to ensure that they can work towards a cost-effective, secure, and connected solution to ensure that their services can run optimally for all users.

AUTOCRYPT began research and development for its fleet management solution, and in 2019 launched AutoCrypt FMS, a customized offering of solutions for MaaS (Mobility-as-a-Service) platforms that desire to optimize their operations and work together with AUTOCRYPT to provide more inclusive transport for all.

### HOW IT WORKS

AUTOCRYPT's proprietary OBD-II hardware collects and utilizes data to ensure fleets are utilizing real-time data for reporting, customized analysis, and big data modeling through machine learning.



MDC1\_02B



MDC2\_02W



MDC2\_02L

The hardware components utilize Bluetooth, Wi-Fi, and LTE connections to gather and transmit data. With this data, MaaS providers can enjoy optimized fleet management service platforms, customized app development, and further consultation as the business model evolves.

AutoCrypt FMS integrates features such as:

- Vehicle diagnosis
- Driving pattern analysis
- Real-time driver dispatch
- Real-time tracking
- Real-time log
- Data management on blockchain
- Driver / passenger authentication

With a wide range of customizable features, the solution showed itself to be an ideal integration for inclusive transport services that require optimization and seamless connectivity to ensure a safer, reliable mobility service for those with mobility challenges.

AUTOCRYPT has been partnering with mobility service providers in Korea to provide customized fleet management solutions for a variety of target groups, including those with mobility challenges.

For this white paper, we will highlight three particular service partnerships and the overall results.

## 2U Access

2U Social Cooperative is a non-profit based in Busan, the second-most populous city in South Korea, with a population of 3.4 million. The non-profit's goal is to provide more convenient transportation for the city and the country's population with mobility challenges.

Through its partnership with 2U Social Cooperative, AUTOCRYPT sought to develop a demand-responsive transport (DRT) service that provides an affordable, convenient taxi fleet specifically designed to serve Busan residents who face mobility challenges, including those with physical disabilities, elderly people, and pregnant parents.



### KEY FEATURES

The service was branded as 2U Access, and the DRT service is offered through a mobile platform developed and secured using AutoCrypt FMS. Data is collected with MDC1\_O2B units that are installed in each 2U Access accessible van.



Through AUTOCRYPT's intuitive and secure 2U Access mobile app, the passenger reserves a taxi by specifying the time, place, and additional assistance needed (e.g. wheelchair, car seat, voice guides).



Based on AutoCrypt FMS, AUTOCRYPT's fleet management system, 2U Access dispatches the optimal driver to meet the passenger at their specified time and location.



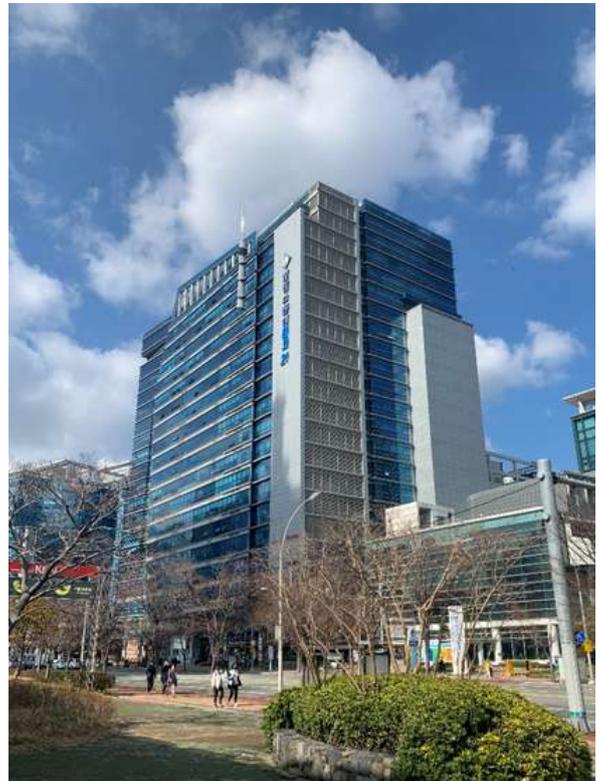
The driver assists the passenger throughout their ride all the way to their destination. Customized assistance is offered with text-to-speech (TTS) guidance to update the passenger on the status of their ride.

## INITIATIVE

As an active participant in building smart cities and establishing Cooperative Intelligent Transport Systems (C-ITS), AUTOCRYPT looks beyond the automotive industry and seeks to solve the challenges of those who do not have easy access to cars or public transit due to either physical or environmental reasons. AUTOCRYPT believes that a smart city is not truly smart until it is inclusive.

Based on AutoCrypt FMS, AUTOCRYPT's demand-responsive transport (DRT) solution welcomes partnerships all across the globe. A main goal of the DRT solution is to provide a barrier-free mobility environment for those that are left out of mainstream transportation.

AUTOCRYPT's partnership with 2U Social Cooperative is one of the first of this kind. 2U Access plans to expand into other cities beginning mid-2021.



AUTOCRYPT's Busan office, dedicated to its partnership with 2U Social Cooperative

## PROJECT OUTLINE

### STEP 1 Assessment of Current Accessibility Conditions

Prior to actual planning, the current accessibility conditions of the City of Busan were analyzed to calculate an estimated demand along with peak times and locations.

### STEP 2 Governance Institution

2U Access involved a number of participants, forming a team of 96 people. About 75% of the project fee was funded by various government bodies, while the rest 25% come from private fundraising.

### STEP 3 Service Planning

2U Access received data shared by city and district governments, public institutions, NGOs, and businesses in the barrier-free sector. Utilizing 324.14 km of wheelchair route data and 36 km of tourism route data, along with survey data from actual residents, 2U Access was able to draw a detailed plan of the specific services to offer and how to offer them in a way that is both efficient and convenient.

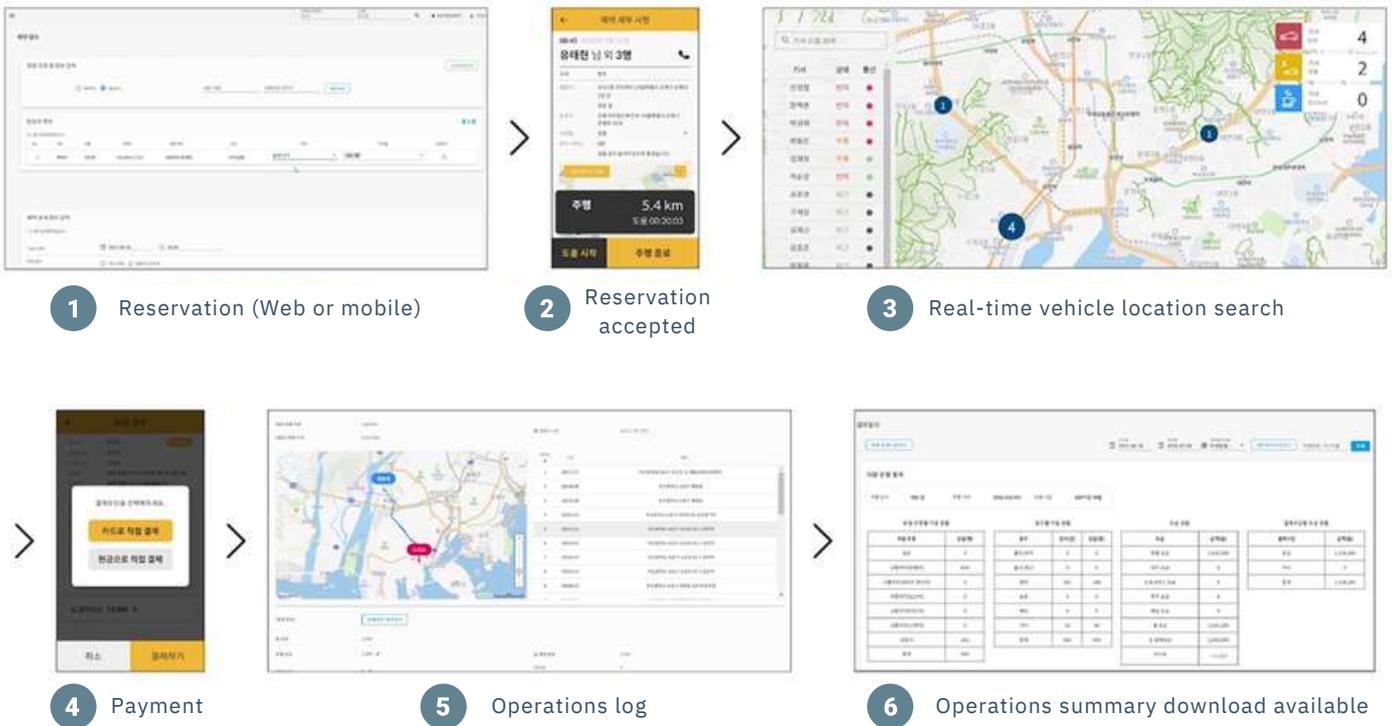
### STEP 4 Application Development

AUTOCRYPT's experienced software developers and security engineers worked together to develop a mobile app with AutoCrypt FMS, allowing secured sharing of information between the flier operator and the passengers.

**STEP 5** Testing and Launching

AUTOCRYPT began launch of 2U Access on January 14, 2021.

**HOW IT WORKS - USAGE DEMO**



**RESULTS**

During its four-month beta testing period in 2021, 2U Access gained 3,226 users and hosted 12,260 ridesharing journeys. Customer reviews demonstrated an average satisfaction score of 85%, with 95% of users showing reuse intention.

**12,260**  
rides

**85%**  
satisfaction rate

**95%**  
reuse intention rate

**MOVING FORWARD**

2U Access is a proven use case illustrating how AUTOCRYPT's DRT solution improves the quality of transportation for those with mobility challenges. 2U Access has already contracted to expand into 30 more regions within South Korea, and AUTOCRYPT looks forward to partnering with other NGOs and businesses both in Korea and worldwide who are also focusing on contributing to the barrier-free transportation sector.

## 2U MAP

With the success of 2U Access, AUTOCRYPT then developed a mobile accessibility map, again partnering with 2U Social Cooperative.

While there have been significant improvements in recent years, many with mobility challenges often detail the issues and barriers they come across when moving from place to place.

**2U Map** is a mobile map application that provides detailed barrier-free directions and navigation information to those with mobility challenges. Setting itself apart from traditional maps, 2U Map utilizes a large pool of data containing information on locations of mobility barriers (e.g. steps, hills, curbs) as well as accessible infrastructures (e.g. electric wheelchair charging stations, accessible bathrooms, elevators).

2U Map is developed and secured using **AutoCrypt FMS**, and currently serves Busan, South Korea, with plans for expansion.



Sidewalk curbs are one of the biggest challenges those with mobility challenges, particularly wheelchairs, face on a daily basis in Korea.



### KEY FEATURES



#### Barrier Locator

Informs the user on the locations and types of mobility barriers (e.g. steps, hills, curbs)



#### Collective Barrier-Free Reporting

Users can submit data for accessibility routes, providing and sharing tips for other users with mobility challenges

## HOW IT WORKS

Pre-development, research teams found that those with mobility challenges, including those with disabilities, are active in online communities that share accessibility information with each other, in order to ease the challenges of mobility.

2U Map is an interactive platform that not only provides information, but is an open application, inviting users to report newly discovered mobility barriers to contribute in keeping the city's barrier-free map up-to-date. Whenever a user encounters an obstacle that is not noted on the map, they are able to pin it down and upload a supplementary photo to update the information in just a few clicks.

Users are also able to record their accessible routes and share it to these communities they participate in, to ease the transportation of others with mobility challenges.

Developed utilizing AutoCrypt FMS, the application ensures that all data uploaded and tracked are kept secure and private.

## RESULTS

During the two-month testing period, 2U Map collected data for 312 barrier-free infrastructures, 262 accessible bathrooms, 148 electric wheelchair charging stations, 36 accessible recreational spaces, and 23 accessible shopping facilities.

2U Map also compiled 13 barrier-free tourism routes from 4 major tourist attractions, leading to additional information about the direction to move in, in terms of app development in the future.

## MOVING FORWARD

Currently, development is in progress to allow for "Barrier-Free Navigation," which would calculate optimized routes based on the user's specific request for barrier-free facilities. For instance, a wheelchair user could request a route to allow them to charge their wheelchair and shop for certain items prior to arriving at their destination. The application would then calculate an optimized route for the request using its machine-learning-based algorithm. This feature would also include an infrastructure finder to allow users to find specific locations of accessible infrastructure (accessible bathrooms, elevators, parking spots, etc.).

Plans are also underway to provide a "Barrier-Free Tour Guide" feature where popular tourist attractions would have detailed barrier-free directions as well as booking accessible tours to encourage accessibility in travel.



Users are able to record their routes to share accessibility information with others.

## iMOM TAXI

Mid-2020, AUTOCRYPT partnered with local governing authorities in Seoul to develop a DRT service specifically designed for those with mobility challenges, with a focus on pregnant parents and families with new infants. Branded iMOM Taxi, the platform provides on-demand taxi services with a simple registration and booking process. Currently available in the Eunpyeong district of Seoul with plans for further expansion, the mobile app is developed on AutoCrypt FMS to ensure data security.

### KEY FEATURES



#### Reserve for pick-up

Passengers can reserve the time and location of pickup through the app. If no vehicle is available at the selected time, the closest available time will be automatically calculated and shown.



#### Pay with voucher

Instead of paying by cash or credit card, iMOM Taxi passengers pay for their ride with vouchers issued by local governments to pregnant and new parents, helping ease the burden of hospital visits.



#### Blockchain-based identity verification

AUTOCRYPT provides user authentication and verification using blockchain technology, ensuring robust security and privacy.



### HOW IT WORKS - USAGE DEMO



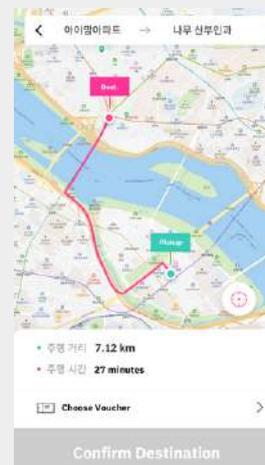
1 Reservation



2 Enter time and location



3 Confirm route and destination



4 Payment with voucher



5 Wait for pick-up

## RESULTS

During its 12-month testing period, iMOM Taxi gained 2,738 users and completed 8,267 rides. Follow-up surveys showed a customer satisfaction rate of 92.1%. Service is expected to expand to other districts of Seoul, helping relieve mobility difficulties for pregnant and new parents.

Many parents noted its convenience and reliability, as all iMOM Taxi vehicles offer car seat services for the safety of infants and toddlers. While car seats are required by law, many other services fail to follow through.

**2,738**  
users

**8,267**  
rides

**92.1%**  
satisfaction rate

AutoCrypt FMS allowed iMOM Taxi to easily monitor and manage their vehicle fleet in real-time while keeping the data of their drivers and passengers private and secure.



## MOVING FORWARD

iMOM Taxi has expanded its service to offer rides to 12 additional hospitals outside of the original service area and increased the child age limit from 12 to 24-months old.

AUTOCRYPT plans to expand this operation to other districts within Seoul as well as partner with similar mobility service providers around the globe to provide accessible and enjoyable mobility for all.

## CONCLUSION

While many of us take transportation and the ability to be freely mobile for granted, there are many who live with mobility challenges, where moving is a barrier. And as mobility continues to become more connected and even autonomous, there is the potential for many in society not to be included in the conversation because they are unable to participate in the aggregate data collection of smart cities, further barring them from participating in society.

The automotive industry is abuzz with conversations on how to bring inclusive transport to the forefront, but more companies, organizations, and individuals from various industries must continue to innovate and develop services, applications, and products that are accessible. Only then will regulations and standards begin to determine inclusive infrastructure as the baseline, and continue to build onto advanced technology from there.

It is our hope that AUTOCRYPT's fleet management solution inspires companies to implement solutions like this into their own services.

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For more information about AUTOCRYPT's fleet management solution, AutoCrypt FMS:  
Learn more at [www.autocrypt.io/products/fms](http://www.autocrypt.io/products/fms)

To contact one of our consultations to see how fleet management may work for your enterprise:  
Contact us at [global@autocrypt.io](mailto:global@autocrypt.io)

